JULY 1998

Interzone 133

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'The Barrier'
Stephen Baxter

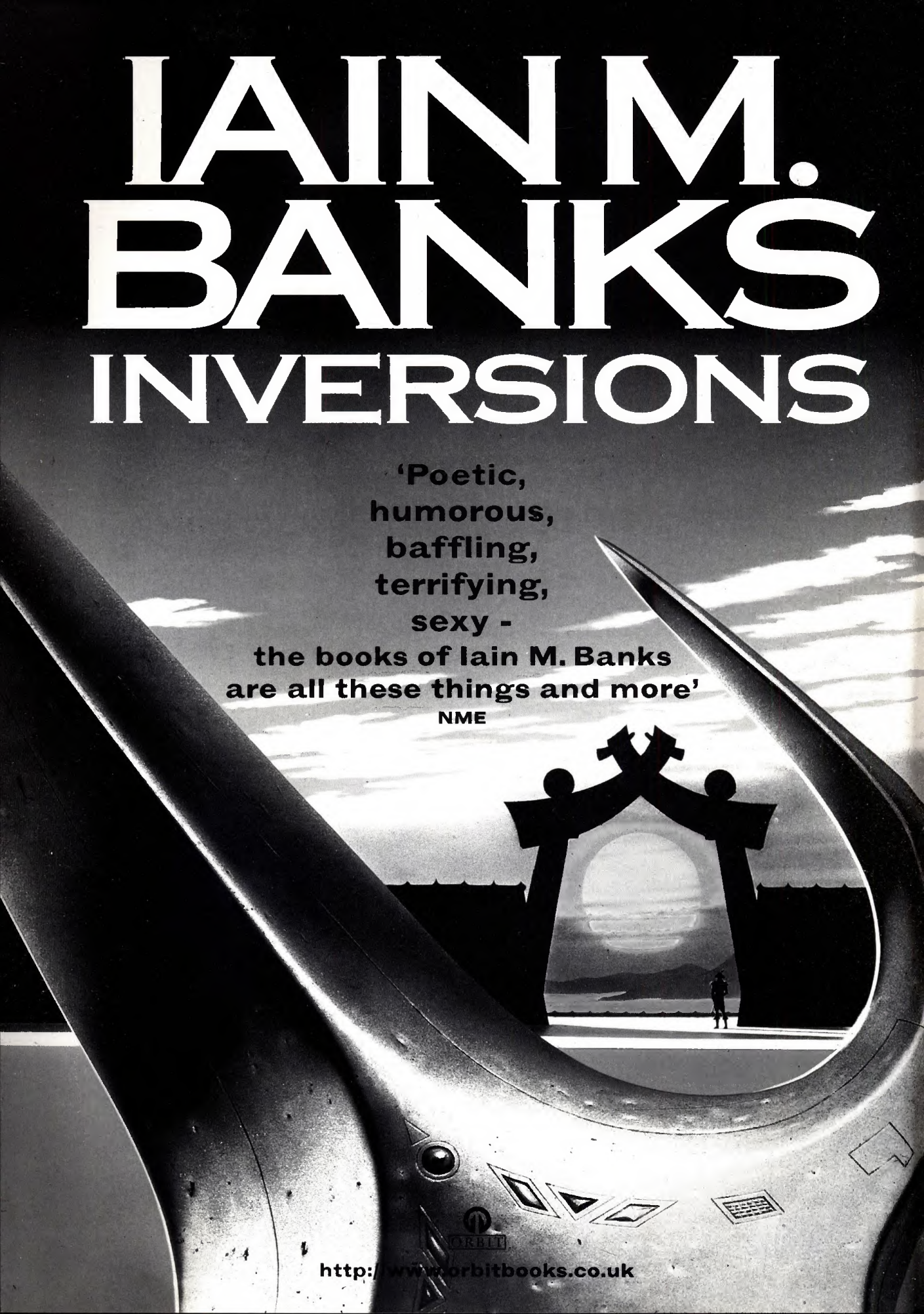


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Submissions:
stories, in the 2,000-6,000 word range, should be sent singly and each one must be accompanied by a stamped self-addressed envelope of adequate size. Persons overseas please send a disposable manuscript (marked as such) and two International Reply Coupons. *We are unable to reply to writers who do not send return postage.* No responsibility can be accepted for loss or damage to unsolicited material, howsoever caused. Submissions should be sent to the Brighton address above.

July 1998

Interzone 133

science fiction & fantasy

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Cover by Dominic Harman for "The Barrier"

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Readers' Story Poll Results for 1997



1)	Greg Egan: *Reasons to be Cheerful*	22
2)	Eugene Byrne: *Thigmoo*	18
3)	Peter F. Hamilton: *Escape Route*	15
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10=)	Alastair Reynolds: *A Spy in Europa*	11
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12=)	Nicola Caines: *Civilization*	10
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27=)	Kim Newman & Eugene Byrne: *Teddy Bears' Picnic*	5
27=)	Liz Williams: *A Child of the Dead*	5

In the February 1998 *Interzone* we asked readers to vote on their favourite (and least favourite) stories published in the magazine during 1997. Fifty-four ballots were received by the 1st April deadline, a sufficient number to give a valid result – 37 were from male readers, 14 from female readers and three from persons of sex unknown. Our thanks to everyone who participated. As usual, we subtracted all negative votes from positive ones to arrive at the following scores. The total number of stories published last year was 56 (down on our usual 60-70 because we published rather a lot of long stories in 1997, including two two-parters; but we hope to have a larger number of stories this year.) To save space, and to avoid embarrassment for those who came towards the bottom of the pile, we list only the top 30 out of the 56 stories.

The remaining 26 stories all scored fewer than five points. As you can see, Greg Egan came a convincing first this year (and not for the first time!), with Eugene Byrne and Peter F. Hamilton in clear second and third positions and then a bunch of people – Paul Di Filippo, Ian Watson, Stephen Baxter, Eric Brown and Molly Brown – vying for fourth to eighth places. Congratulations to all these authors on doing so well, and indeed to all the others who scored in the top 30.

Paul Di Filippo's "The Happy Valley at the End of the World" and Greg Egan's "Orphanogenesis" – two of our more praised stories of the year, to judge from sundry letters and comments received – both attracted surprisingly large amounts of negative votes, pushing them out of the top 30. In fact, Egan achieved the remarkable feat of coming both first and last in the same poll ("Orphanogenesis" scored -5 points). It would seem many people are weary of alternate-world stories, and many also take unkindly to novel-extracts (however "self-contained" the extract may be, and in fact we still believe "Orphanogenesis" was a well-formed short story in its own right). OK, points noted: we do not promise never to publish another alternate-world story or novel-extract – it all depends on just how good they are – but it's certainly our wish right now to see fewer of them.

David Pringle

Dear Editors:
The letter in May's issue from Paul Western reminded me that I may not have sent in my votes for the best of last year's stories. In case it's still not too late, I just want to boost Greg Egan's "Reasons to Be Cheerful," which was by far the best story I read anywhere last year, in any genre, and I was extremely disappointed in the members of the BSFA for not giving it the best short-story award (it wasn't even nominated! – inexplicable). The maturity and depth of humanity in this story, not to mention the sheer science-fictional brilliance of Egan's seedthought and subsequent explication, just left everything else in the dust! How Mr Western left this out of a list in which he championed Egan's other piece is another mystery. Perhaps it was the forgettable title which was to blame, but this story has got to be as worthy of classic status as "Flowers For Algernon" or "A Rose For Ecclesiastes" or that Sturgeon story, what was it... "And Baby Makes Three"? Anyway, I'd actually go so far as to say this was a more perfectly formed piece of sf than any of those venerable classics. And I ain't saying that lightly!

I see with disappointment that Mr Western has chosen Alastair Reynolds's "A Spy in Europa" for his list. I like Reynolds's stuff quite a lot normally, but I have to say I found the scenario of the denouement totally unbelievable, the reasoning just rubbish, frankly; and I remember being terribly let down by its faulty motivations or something... an unsupportable flaw in thinking, anyway, doubly disappointing from a decent writer of fairly hard sf... so I want to cast a vote against it. Thanks for being! Or should I say *IZ*-ing?

Syd Foster
Swansea

Dear Editors:
Interzone continues to throw up surprises (sorry if the image that conjures up is as revolting for you as it just was for me!). Stephen Baxter's endearing "The Twelfth Album" in *IZ* 130, for example, is a surprise simply because it is so much better than much of his recent work, and better than I've come to expect from alternate history. Often it seems that writers/editors of alt-histories are concerned only with politics, while there are so many other areas worthy of exploration. If I have a problem with alt-history it is exactly that narrowness of ambition, I don't see too many intrinsic flaws in the story-type itself.

Then in *IZ* 131 we have a head-swimming change of pace by Paul J. McAuley. I'd like to think that the

manic and gruesome "The Secret of My Success" could creep into a non-sf anthology somewhere; I have this naive notion of science-fictional ideas being welcomed in other genres.

Other delights in these two issues were the stories by Brian Stableford, Madeleine Cary and Stephen Dedman. Also, Sylvia M. Siddall's "Dryads" was a slight effort but I enjoy her work lots and I hope that her novel gets picked up – I promise to purchase it if I'm given the opportunity.

On the non-fiction front, I enjoyed the terrific interview with Molly Brown (what a woman!); the continuing cat-fights stirred up by Gary Westfahl are a hoot; and perhaps most surprising of all, I find myself enjoying Nick Lowe's film reviews. Ever since his article on *Starship Troopers* he seems to be finding positive things to say about most everything. He must be in love, or something. Keep the surprises coming and I'll keep reading.

Chris Butler
Farnborough, Hants.

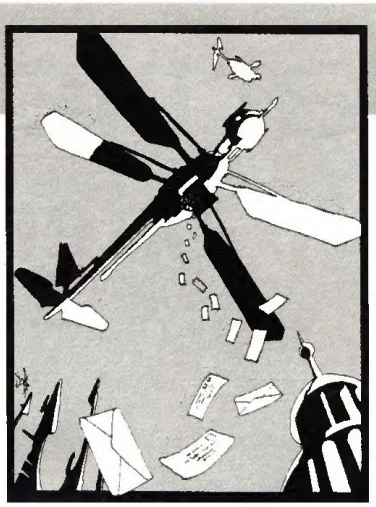
Dear Editors:
On the subject of short-fiction monthlies, following on from your editorial in issue 129; I was chatting with my wife about the subject of monthly professional short-fiction magazines, and she pointed out another (arguable) current example.

Of course, there are any number of monthly (and more regular) magazines that publish *some* short fiction, and the whole range of "women's magazines" represent a respectable industry in publishing terms, but most treat fiction as secondary. However, one, *The People's Friend*, sells primarily and mostly as a fiction magazine (and it appears still to be published very regularly).

Its specific genre is, of course, a long way from that of the likes of *Interzone*, and it is run from and mostly (but not solely) sold in Scotland. What I suppose is interesting, however, is that it exploits a niche that may represent the last remnant of the sort of market that the likes of the American *Saturday Evening Post* fed in their time – people in relatively remote rural communities who regard short fiction as a major source of entertainment.

Phil Masters
http://ourworld.compuserve.com/homepages/Phil_Masters

Editor: *Thanks, Phil.* The People's Friend *is published by D. C. Thomson, the old-fashioned Dundee-based company that publishes the* Beano, *the* Dandy *and other comics (and a famous weekly newspaper,* The Sunday Post, *with its long-lived strips such as "The*



Broons" and "Oor Wullie"). I'm familiar with it, since my mother reads it, and I see piles of it by the guest-bedside when I visit her in Scotland. (Maybe she's trying to tell me something – jings!) It's a weekly, not a monthly. I suppose it could be regarded as a very shrunken equivalent of the legendary Saturday Evening Post *(which died in 1969), but I tend to think of it as a typical 19th-century "story paper" that has somehow lingered on into the late 20th century – but then the* Sat. Eve. Post *originated as a 19th-century weekly story paper too... so perhaps you're essentially right. The difference is that the* Sat. Eve. Post *was a story paper which became a big slick magazine (in American parlance), while* The People's Friend *has remained a mere story paper – the coelacanth of UK publishing. Or maybe there are* two *bony prehistoric fish still lurking in British publishing waters:* The People's Friend *as the last weekly story paper, and* Interzone *as the last monthly fiction magazine.*

Dear Editors:
I would like to congratulate Gary Westfahl on his column in *IZ* 131 for wittily expounding exactly the kind of intellectual and imaginative Luddism perpetuated by a number of inverted snobs working within the science-fiction community. Thank you. So much. Does he not consider that a genre which constantly strives to be beyond the cutting edge of both technology and imagination in its content, shouldn't also try to stretch the boundaries of form as well? Or would having to concentrate on the style as well as the story give him a headache? We should revel in the new language attempted in *Stars in My Pocket Like Grains of Sand*, delight in the mesmerizing narrative structure of *The Female Man*, relish the tightly-controlled rug-pulling beauty of *The Affirmation*. Or what are you looking for – ideas propounded by hacks until they are like so many *Star Trek* novels (and there are already too many of those)?

I wonder sometimes whether some people in science fiction shouldn't peek over the walls of their self-built ghetto and have a look at what else is going on. If Eduardo Mendoza can sum up a world of passion and suffering with such grace and economy that *The Year of the Flood* only stretches to a satisfying 118 pages, are the Eddingses and Modesitt Jnrs of this world not missing something? Janice Galloway, in *The Trick is to Keep Breathing*, conveys as much emotion through her deconstruction of narrative form as she does with the words she uses. How many writers of science fiction and fantasy can place a single, solitary, monosyllable on an otherwise blank page and crush the reader with its power? Not many. Or perhaps they can, but the controlled conventions of the genre are such that it doesn't occur to them to try.

Mr Westfahl is very clever in his glib way, and I understand that writing something contentious can get you column inches, readers, get you known, but there are readers out here who want innovation, beauty, intellectual stimulation beyond what kind of fuel an engine burns or the size of the little droids that clean out your furred up arteries for you. Geoff Ryman is one of the few sf writers genuinely breaking new ground, giving his readers something more to enjoy and to think about. I'll admit I felt "Family" would have worked better with the PC as its medium than paper and ink, but the idea itself, the disdain for convention and for genre, gave me great pleasure. Science fiction should be about new technology, new expression, new language, new media. The novel will only die if it isn't constantly re-invented, and the genre novel will founder if it doesn't at least try to catch up.

David Burrows
Camberley, Surrey

Dear Editors:
Obviously I'm not alone in having greatly enjoyed Mr Westfahl's columns. And if, as Mr Falconer suggests ("Interaction," *IZ* 131), it's the case that you wished to cause a bit of controversy then you made the correct decision.

Controversy and argument are a necessity to the life of a magazine. It is heartening to see ideas shaken rather than stirred in this era of Third Way politics and other such balderdash. I suggest that *Interzone* is rather conservative. It ought to be much more controversial.

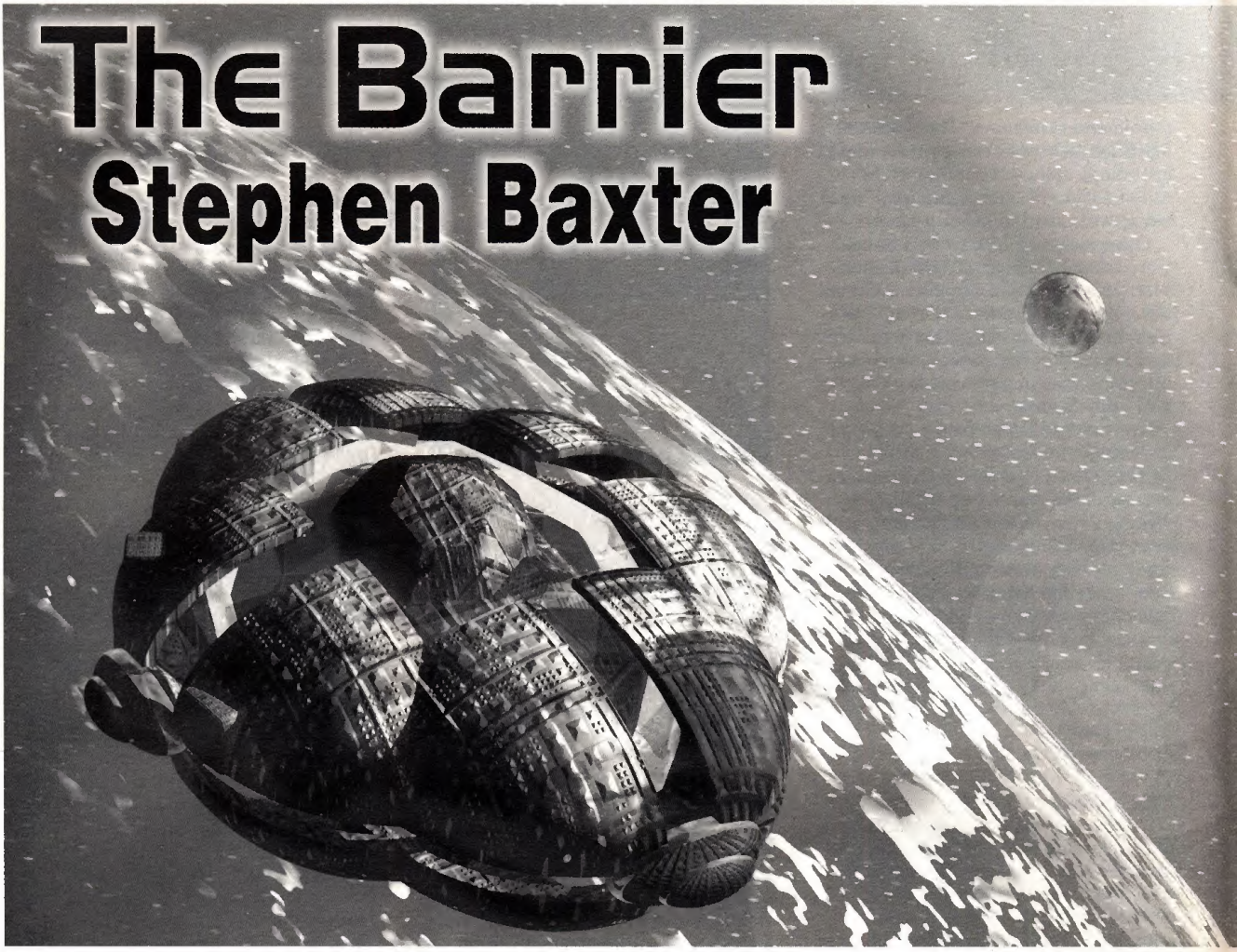
Unleash those reviewers to give us gut feelings instead of polite pussyfooting. If *The Postman* is drivel then say so! Don't tell us that *they* stripped out the intellectual ideas from the novel to give us an excuse of a movie. Sometimes I think I detect the slow roil of jealousy and discontent.

Lesbian sword-and-sorcery cat sleuths. Bring 'em on...

Norman Finlay

The Barrier

Stephen Baxter



Let me say at once that I have no regrets.

Both Gurzadian and I were men with wings on, and that means we were willing to accept risks. Naturally nobody expected the contingency we've come up against here, but we always knew the odds were against us in terms of getting all the way to Proxima II. In fact we would both have volunteered, even without the Draft.

I'm downlinking everything in the hope somebody will pick this up, although we've had no contact with the ground for a hundred days now. *Geezer* seems to be stuck fast in this barrier at the edge of the Solar System, so maybe someday somebody will come out here to pick this up, and read it.

I'm not one for melodramatic gestures.

I'll complete as much as I can before the hull implodes.

I joined *Geezer* in LEO.

I launched in a new-series Soyuz craft from Kazakhstan. Chemical technology: obsolete in these days of the Bias Drive, of course, but you may as well shoot 'em off as break 'em up. There was a sign on the launch pad saying "Reliable Launch Complex Guarantees Success." That's the kind of little touch you just don't get back home any more, which, in my opinion, is all part of a more general decline.

There was no foofaraw when we left. This was not Project Mercury. A lot of coverage of America's first interstellar mission failed even to mention the fact that two human beings were going along for the ride, and we never met a single one of the program's head sheds. Once, when I flew Shuttle, I got to shake the hand of Ronald Reagan. Things sure have changed.

Anyhow it was a thrill to feel those bolts blowing, and that boot up the rear as the Gs cut in, and to know I was leaving Earth once more.

The truth is I'd gotten pretty tired of sitting around in the grey gulag waiting for my Demograph Draft. Anything would be better, I'd decided, even a ticket to the happy booth. And when my notice turned out to be the commission for *Geezer*, I was pleased – even relieved – but I found I wasn't really so surprised to hear that old shipping-over music one more time.

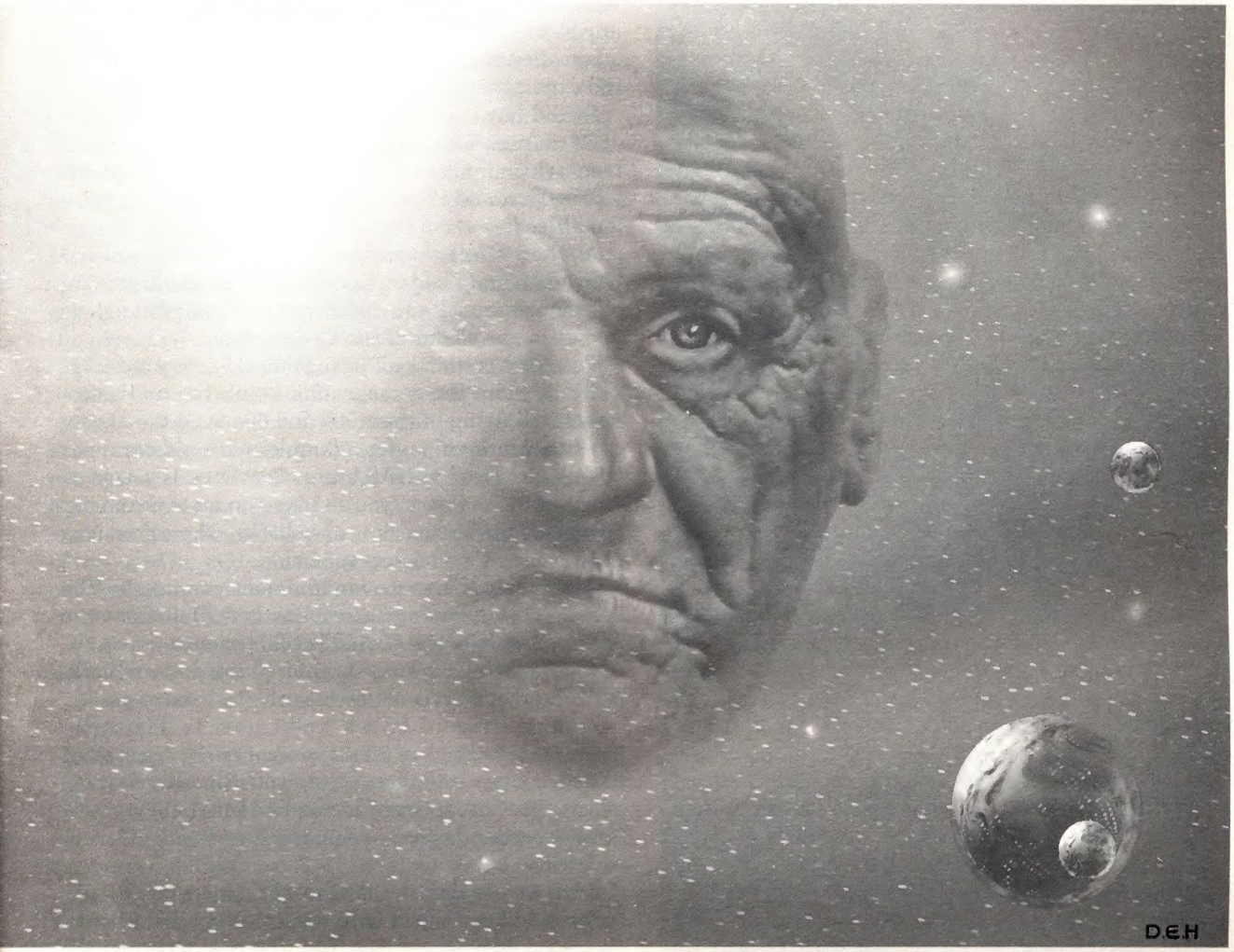
I was already over 90 years old.

But I knew I was more than capable of returning to space, of doing this job. Jenna always said that I have spent much of my life trying to appear humble, but failing. Humility is not a favoured trait among air and space pilots, where a high premium is placed on performance.

I suppose, however, I was surprised to find that the Draft was leading me, not to some sky-boring LEO mission as I first thought, but to the stars themselves.

The Bias Drive's acceleration is pretty low. We spent weeks in Earth orbit, slowly spiralling away.

All in all, the old world hasn't changed much since I first saw it from orbit in the early 1980s, Christ, nearly 60 years ago. Can't honestly say it looks *better* now, however.



Illustrations by Dominic Harman

There's more desert, of course, all around the tropical belt. The cities are bigger and brighter than they were, although over the US – what's left of it since the secessions – the view is obscured by the huge megacorporate logos laser-painted on the lower cloud decks. The logger wars are still blazing in South America; you can see the flash of weaponry at night.

The China-Russia border is just a wilderness. You can see the string of bomb craters. I know there are still some who criticize the Administration for keeping us out of that conflict. Not me. A well-trained military man has reason to fear war.

As we receded the signs of humanity were soon invisible. Earth became a planet of ocean, desert and ice, just as it always was.

We sailed past the bony Moon, and I glimpsed the shadows of Farside craters. I found myself singing that old song: *Drifting and Dreaming*. Even as a kid in small-town New Jersey I never dreamed I'd go further than this.

Well, I was wrong. Earth and Moon receded, blue and grey.

Gurzadian, my sole crewmate, was ten years older than me. He had a head like a bullet, a barrel chest and arms like a big Russian bear's. He habitually wore a rumpled red jump-suit with the legs tied off in knots. The loss of his legs, after a Soyuz landing accident long before *Geezer* was ever thought of, didn't make a damn difference to his mobility as far as I could see. In fact Gurzadian was living proof of the saw that in space your hands and arms do all the work and your legs just get in the way.

I don't know what I need tell you about *Geezer*.

Geezer – strictly *New Explorer* – is mankind's first interstellar craft, and it is a big maumoo. It is a cluster of six modules nose to nose around a transfer node, which is a Grand Central Station for ducts and pipes and cables. The modules are wrapped in thick insulating blankets, yellowing now and pitted by micrometeorites.

Five of the modules are for science. There is a base block where we – I – sleep and live, and where the controls for the cooling systems and oxygen regenerators and waste recyclers and other stuff are situated. It's like my old garage in here. There's stuff bolted to every wall, and to reach anything you have to move layers of kipple. The pumps and fans make it sound like an old boiler-house. It always sounds louder at night; I don't know why that should be. And it smells like a library: old books, mixed with a little engine oil. The musty book smell is mould, of course.

Our power comes from big clunky nuclear fission reactors descended from the old Soviet "Topaz" design. The design of most of the components of this craft is basically Russian, in fact. The Russians have been learning to live in space with this technology for decades, and I for one was happy to step aboard.

There are small automated orbiters and landers studded around the cluster, gliders and entry pods,

intended to be deployed when we reached Proxima II. The probes are modern: small and smart, built around the latest autonomous-software designs – qubit technology in fact – and their micromechanical systems pack a lot of punch per pound. But they can't carry people, not even a pair of chicken-boned old farts like Gurzadian and me. Well, that's the nature of the modern space program, and there's a whole debate to be had about man versus machine and the nature of human exploration I don't have the time to get into here.

The Bias Drive is just a little black box mounted on a boom.

It thrusts through the cluster's centre of gravity at a steady one per cent of G. Not much, but enough to get us to Proxima in 40-some years, with a peak velocity at turnaround of 80 per cent of lightspeed. Quite a marvel.

Of course you have to realize that it's only the propulsion technology that has developed since my day. Otherwise *Geezer* is just Station technology with a few more life-support loops closed. When the solids recycler broke down Gurzadian and I still had to take the covers off and stir our shit by hand. Hey ho.

Forty years isn't so much. But nobody can build systems for 40-year reliability, not without qubit technology anyhow. And that's why we were sent along for the ride.

Qubit technology is quantum computing. In a qubit chip, the bits are represented by the spin states of chloroform molecules. It seems these spin states exist *simultaneously* in some spooky way. A qubit machine beats out a conventional device every time because it can process its bits, not one after the other, but *at the same time*.

The problem with qubits is their fragility and expense, and hence rarity. The top-of-the-range stuff is forever snapped up by the big corporations for their commercial purposes which, like the doings of federal agencies, are generally beyond me. The world is now run, it seems to me, by huge, shadowy qubit AIs, far beyond any kind of democratic control.

Anyhow, for sure, NASA and the federal government can't afford to buy in qubit technology big time. And there's the paradox.

It used to be that people were too expensive to haul into space, because they mass so much, not to mention all the related plumbing. It was more cost-effective to send out a smart little robot to explore by proxy. But the equation's changed. The robots have gotten much more expensive. Meanwhile the Bias Drive has made human spaceflight dirt cheap, comparatively. Suddenly it's cheaper to ship two old fuckers like Gurzadian and me, plumbing and all, with a brief to keep the ship's systems working long enough to reach Proxima.

Our telomerase implants should have kept at least one of us alive that long.

A telomere is a series of organic compounds which cap the ends of chromosomes, like the plastic tip of a shoelace. The telomere gets shorter every time a cell divides. Eventually, the cell won't divide any more, and it dies.

When I reached my 75th birthday I was able to purchase telomerase treatment. Bluntly speaking this enzyme restored the telomere tips of my cells, and they became youthful again. My bones stopped getting weaker, my spine stopped curving, my skin stopped from sagging, my brain stopped shrinking, my shanks stopped withering, my gums no longer retreated. I wasn't getting younger, of course, but I wasn't getting any older either. I'm not spared the various afflictions of age. But thanks to my telomerase implant I have a life expectancy of 150 upwards.

Or did have.

Of course the irony is that it was telomerase treatment which finally blew the values our society out the water. That and the collapse of Medicare. In my opinion at least.

Anyhow it all worked out. A few months out and Gurzadian and I had stripped down and rebuilt this big old bomber until you could have run a white-glove inspection any hour of the day or night.

There is a certain logic in sending old guys into space.

Even before the demographic bomb you had astronauts still flying in their 50s and 60s. And the idea of crewing Mars ships, for example, with oldsters was openly discussed at NASA and elsewhere. If you go as far as Mars and back, you've taken on more than your recommended lifetime dose of radiation. Not a good idea until you're done having your kids.

Conversely the space environment can actually be beneficial. I know my heart has benefited from the reduced strain of low G. And we old timers are patient. A spacecraft is a cramped, unforgiving environment, and a hotshot of 30 is not necessarily the ideal crewman.

Frankly I regard myself well suited to this berth. Experience is the key. Mock combat is *not* equivalent to facing a guy intent on killing you. Simulated emergencies are *not* an equivalent experience to bringing a Shuttle orbiter down on one fuel cell, as I once did. And so forth.

What I'm saying is that I'm not sure a wet-diaper crew could have coped with what we found out here.

I remember I was eating when the first problem came up.

I was at the tiny table in the base block with my legs wrapped around my T-seat. Most of what we got to eat was Russian stuff, warm borsch and jellied perch, which is okay when you get used to it. But it was Christmas week, and that day I was treating myself to stew. I always liked Christmas.

In came Gurzadian, swimming through the air like a fat Russian dolphin. He was somewhat excited. He was jabbering in a mix of Russian, English and pidgin, and when I slowed him down enough to untangle it all, it turned out he thought we had a problem with our trajectory, or maybe our navigation systems, or both.

Since at the time we were rather remote from Earth – in fact, after 21 months, we were already more than twice as far from the sun as Pluto – this could, I felt, ruin my entire day.

Let me set out the elements of interplanetary navigation. Navigation means the skill of plotting a route and directing a craft along it. In practice you determine your ship's state – that is, its position and velocity – and estimate a trajectory from that point. The problem is made more interesting by relativistic effects as you approach lightspeed, such as aberration. All of this is an exercise in constrained optimization and adaptive parameter estimation, techniques in which I am somewhat skilled.

When Gurzadian raised the alarm, I found our position and trajectory vectors were all undetermined.

We began internal system checks. We have two basic data-gathering systems. The first of these is radiometric, in which our range and speed relative to Earth are estimated from properties of our radio signals, such as round-trip delay times and Doppler shifts. The second system is optical. We determine the craft's position and attitude using observations of background stars and the planets. To achieve this we have a small Cassegrain telescope coupled to a light-sensitive diode sensor array. Measurements are accurate to one second of arc.

The radiometry was all over the place, and the optical suite couldn't find any of its target stars, and even the planets weren't where they should be.

We checked the systems and found them faultless. I also ran a number of diagnostic tests on the computer systems which supported the navigation suites. These are all American systems. They aren't qubit, but they are based on ex-USAF rad-hardened silicon systems, and are pretty damn reliable.

Gurzadian, being Russian, was somewhat sceptical of this, and he said something sarcastic along the lines of, "Well, if there is no fault in your systems, my friend, there must be a fault in the universe."

That was my prompt to look out the window. And, by golly, he was right.

That was when we lost contact with the ground.

It was a shame, because the first few months of the mission had gone about as well as could be expected.

Gurzadian and I had gotten along pretty well, given our culture clashes. Russians always assume Westerners are soft and weak. Gurzadian would be condescending to me, and he tried to protect me from bad news. There was the time I woke to the smell of smoke. Gurzadian shrugged, and said there had been an unplanned burning of an oxygen cylinder. It turned out there had been a sheet of flame three feet long that nearly burned through one bulkhead in the biotech module. But this "unplanned burning" wasn't a *fire*, you understand, because nothing else had caught alight. And as Gurzadian had put it out he hadn't thought necessary to report it to me.

The Russians in space just get on and fix things without whining. Basically I admire that attitude; it's something else we lost, somewhere along the way.

The highlight was the gravity-assist swingby of Jupiter.

We dug deep into the gravity well, for as you may know the lower the perijove the greater the assist obtained. Of course we were also thereby taken through Jupiter's magnetosphere, the most ferocious radiation environment in the Solar System outside the orbit of Mercury, but that's okay; the little Proxima orbiters and landers are rad-hardened, and we'd both long exceeded federal worker radiation dose allowances, not that anybody gave a shit.

Jupiter is a hell of a sight, let me tell you. The shadows of the Galilean moons sail across the cloud tops, which are a kind of autumn gold, dimmer than you'd expect. My trusty Hasselblad jammed at closest approach, but I was able to tear it down. The problem was the gear train, a problem I fixed with a speck of Neosporin, an ointment from the medical kit.

Anyhow the whole thing was terrific. Like something out of James Blish – remember *Earthman Come Home*?



– the stuff that got me into space in the first place. Even Jupiter was a sight I never dreamed of seeing for myself – and here I was on my way to Proxima Centauri.

I remember the stir when the first direct images of the Proxima exoplanets came in, blurred dots captured by the Hubble and the Superhubble in the early '00s. One superjovian, ten times the size of Jupiter, swooping in to about half Earth's distance from the sun, and a string of five or more smaller Jovians. The interesting one, of course, is Proxima II, which looks to have a bunch of Earth-sized rocky moons, all about the right distance from the star for liquid water.

Of course back then I never expected anyone to be sailing to the stars: not in my lifetime, probably never, certainly not if NASA had anything to do with it. But then NASA invented a star drive by accident.

In the late '90s NASA started its Breakthrough Propulsion Physics Program, operating out of Lewis. No serious money, of course, just a handful of wacko funny-physics egghead types and a Web site. A PR stunt while NASA poured billions into Station.

... Until, out of the blue, the double-domes came up with the Bias Drive.

Gurzadian could have explained it better than me. It seems that the whole universe, atoms and people and stars, is generated from the wriggling of a membrane floating in 11-dimensional space. One of those dimensions is collapsed down, rolled up to a tube, and the way the membrane wraps itself around that tube generates the properties of the particles and forces we see around us.

This is the M-theory: the new theory of everything. The M, it seems, stands for "membrane," but as far as I'm concerned it could equally be "mirrors" as in "smoke and." They teach this stuff in the high schools now. Science has come a *long* way since I flunked geometry.

It seems that old membrane can wrap itself up in two ways. A single loop generates energy levels from modes of vibration, like a violin string. Or the membrane can wind itself around the tube many times, and the number of turns gives you energy levels, like coils around an armature. One wrapping mode describes the large-scale structure of the universe. The other mode describes small-scale energy structures, such as those of an electron.

But here's the catch: when the tube is middle-sized, the vibration modes look the same as the wrapping modes. That means that the universe on very small scales looks the same as it does on large scales. This is called duality. For instance, electron charge by one description is equivalent to the size of things in another.

Anyhow that, as I understand it, is how the Bias Drive works.

A tiny piece of the universe is shrunk down and manipulated. Another piece, linked by duality, opens up behind the ship. It is a miniature Big Bang, a wave of space-time that pushes us forward. A little more precisely, the drive creates a localized asymmetric bias in the properties of space-time which generates a local propulsive gradient on the ship. It amounts to a rocket of infinite specific impulse.

It was as if space propulsion technology leaped forward a thousand years overnight.

We should have expected something like the Bias Drive, back in the '80s or '90s. After all we'd been flying the same old Nazi missile technology for 50 years by then; we were overdue for a breakthrough. Gurzadian said science and technology doesn't proceed in a smooth upward slope, but with big upward hops between plateaux. *Punctuated equilibrium*, he called it. And we lived long enough to see one of those punctuation marks.

Anyhow, that is how I found myself sailing to the stars. It's the paradox of modern America: a land of starships on the one hand, gulags for the old on the other. Maybe these tensions were already there, back when I grew up in New Jersey. All I know is it's no longer *my* kind of America.

After that first panic, it took some days to establish what was going on.

The radio signals from Earth were reduced in frequency, as if red-shifted, and subject to excessive time delay, and reduced in magnitude. When we managed to reacquire the signal, Houston and Kalinin were both saying they had lost our beacon signal.

We tried adjusting frequency and boosting the amplitude, but nobody, it seemed, could hear us.

Meanwhile we measured whatever it was that was happening outside. I backed up the ship's sensors with my own observations; for instance I mocked up a small theodolite to measure star angles.

To cut a long story short: the magnitudes of the target stars were all lower than they should be. The *angles* between the target stars, when we managed to identify them, weren't what they should be.

I couldn't come up with a consistent model for what we were seeing. If we'd somehow gained too much velocity, that could explain some of the effects, like the excessive redshifting of the ground signals. But it didn't explain the redshifting of stars *ahead* of us – stars which ought to be turning blue as we hurtled toward them. And besides, those changing star angles weren't consistent with any such hypothesis.

Gurzadian developed his own theories.

He said that as far as he could see space itself was distorted around us.

He'd set up piezoelectric strain gauges to prove it to himself. It's kind of flattening out, he said. There were stresses acting across *Geezer*'s cluster because of that – like tidal stresses.

It was, he said, as if we were trapped in a bubble universe, which was collapsing around us. Ha ha.

Meanwhile Gurzadian thought about the bigger picture.

He quoted the assumption of mediocrity. We'd flown out of the Solar System, straight into this muddled space. There was no reason to suppose the trajectory we'd selected was special in any way. Therefore you had to assume that the muddled space lay all around the Solar System, like a shell enclosing the sun. A barrier. And all we could do was keep on driving into it.

All I knew was, every time I looked out the window, the stars were getting dimmer and redder.

But then there hadn't been any scenery since Jupiter anyhow.

I'll be truthful and tell you that we'd got a little bored, before we hit the barrier anyhow.

Of course we have a giant online library. I wish we

had more honest-to-God *books*. But the truth is my concentration isn't what it used to be. The surgeons call it the Tithonius syndrome: immortality, but ageing.

We played games a lot. Low-G games, like where Gurzadian would make a loop of his thumb and forefinger and I would try to throw a pen through. We were a little better at catching cinnamon cubes in our mouths, like at cocktail hour with peanuts. We'd make it more interesting by knocking the cubes off course with blasts from an air hose.

Gurzadian played a lot of his favourite discs, which are all Russian romance music. My hearing isn't too good now so I forgave him that. Sometimes I admit I longed for the clean howl of an electric guitar, however.

We would one-up each other continually. And we would bullshit, in a mixture of languages, the whole damn time. Mostly about the past, but that's old people for you.

I may have mentioned I grew up in a small town in New Jersey. My father had been an Army flier. He took me up for the first time when I was eight, in a beat-up Aeronca C3. We climbed into a stiff wind that blew so hard we flew backwards in relation to the ground. From then on I was hooked.

I cut my teeth as a brown-shoe Navy man. That is, I was a Navy aviator. I saw some combat in Korea, which is detailed in the record. Later I moved to the Test Pilot School at Patuxent; I was therefore a member of the Society of Experimental Test Pilots before I joined the space program.

I wasn't sorry to retire from NASA. Once, briefly, we were a space-faring nation. England, Spain and Portugal crossed the seas and found greatness. Similarly we reached for the skies and ennobled ourselves. But I believe NASA has long lost its success mystique, and I have come to understand that our snout-in-the-trough politicians will not commit to a program that may take more than ten years to come to fruition, which rules out most serious ventures. To me it's all of a piece with other turns our society has taken, which, while disastrous, are no surprise.

After NASA and the Navy I went into various business ventures. I served on the boards of several suppliers to the major aerospace contractors. I retired from *that*, and went to live in a retirement community built like a fortress, and played a lot of golf. I thought I was heading for a rather long but comfortable dotage. The only cloud on my horizon had been the loss of my wife, Jenna, to cancer.

That was when Congress started passing the demographics bills, which is why, in a nutshell, I find myself here.

Gurzadian was always rather more reticent about his background.

I knew that after leaving the Soviet space industry, he'd fled the collapse of Russia and found some work on Wall Street computer systems. But then he committed the crime of growing old.

He'd been living quietly alone when it started. The talk show jokes about long-lived geezers. The commentaries and black humour about the demographic bulges, the lack of jobs for the young, the burden of the growing number of elderly. The implicit approval for neglect and cruelty.

Gurzadian actually witnessed one of the early attacks on a retirement home, the fat cops standing around doing nothing. He went hobbling in on his fake legs and got beat up for his trouble. Saved a couple of lives, however.

He said he wasn't surprised by what followed: punitive age-related taxes, the removal of the vote at age 85, the grey stars we had implanted on our palms. He said it was a pattern he'd seen before: first they remove your dignity, then your property, then your rights, then your life. Until at last you're cleansed.

We talked for long hours. The way he told the familiar story was chilling; this was a man who had seen it all before, in a different context. The difference was, this time it wasn't one ethnic group against another. It was children against parents.

The thing of it is, of course, someday every last one of those who abuses us now is going to cross the barrier into the place we're at. Payoff time.

Please note we did have work to do.

In the cluster's various modules we did biotech research, and low-G material science, and astrophysics. Gurzadian had some astrophysics training, but we were both basically aviators. Therefore the "science" we did was simple lab rat stuff, working sensors and running experiments for ground-based researchers. There was a lot of the usual Nazi-doctor medical stuff as space slowly killed us.

Gurzadian studied quasars. A quasar is a primitive galaxy lit up by the collapse of matter into a central, supermassive black hole. As the first observers to travel out of the dust-laden plane of the ecliptic, that was a key objective for us. Gurzadian said we were looking for the most ancient quasars, relics of the dark age of the universe.

He liked to tell me stories, the potted history of the universe.

First there was the light of the beginning. But as the Big Bang fireball expanded and cooled the light shifted out of the visible region of the spectrum, and the universe entered a dark age: just a few pinpricks, giant early stars and scattered quasars. The darkness lasted millions of years, while the universe grew a hundred times in size – until the first stars and galaxies formed, and the cosmos lit up like a Christmas tree. Quite a sight.

Eventually the universe will be dark again, said Gurzadian. The star stuff will run out. It will take a trillion years, but that's *nothing* compared to the long future.

We're fortunate, said Gurzadian. To exist in this little interval of light, between the darknesses. It made me glad, briefly, to be alive.

As the first interstellar explorers, we would argue about the philosophy of starships. Like the old Fermi question: where the hell is everybody?

The galaxy contains hundreds of billions of stars. If just *one* of those supported a colonizing civilization, even with ships no more advanced than *Geezer*, the galaxy would be completely conquered in no more than a few million years. As the galaxy is *billions* of years old, Earth should have been colonized a hundred times over before life crawled out of the sea, and the night sky ought to look like Los Angeles from the air.

But it doesn't.

Gurzadian had thought long and hard about these problems. The Russians have always had more than

their share of space dreamers. Gurzadian believed *they* must be out there, looking in, because it's logically impossible that they don't exist. Maybe we just aren't smart enough to recognize them. Or maybe they're keeping themselves hidden. The zoo hypothesis, that's called.

Maybe we'll find out the answers at Proxima, he would say. Ha ha.

Funny thing was, he was half right.

I'd like to put on record I was more than happy to accept Gurzadian as my crewmate. We didn't always get along, but he knew this old bird inside and out before we left the ground. Besides which he was actually a pilot. In my opinion people who don't fly the spacecraft should not be called astronauts. Both Gurzadian and I were, you would say, out-of-the-pack people.

And, let me say, we both preferred talking philosophy and the old times to mulling over Demograph Draft horror stories.

I don't think either of us lost much sleep over those dimming stars.

It was kind of a relief to find that our problems were only cosmological – that it was indeed the universe that was at fault and not our craft. We remained calm, and continued to do our bits of science, and to downlink our results and progress reports, whether or not anybody could hear us.

If that sounds peculiar, you have to remember that neither of us were meant to survive the mission anyhow.

The stars winked out one by one, fading into a redness like the inside of my eyelid. I admit my heart thumped a bit on the day we lost the sun.

But the thing of it was, we could see something ahead. Something new.

Grey stars.

Not Proxima Centauri, though. Not really stars at all, in fact. Just a scattering of grey lights around the sky. Gurzadian said they looked like quasars. He was scared. None of this made sense to him; he couldn't figure out what we were seeing, what had happened to the stars.

As for me I felt kind of cheated. It's no longer clear to me if Proxima even exists, or if it – and its planetary system – aren't just some artefact of the huge shell which surrounds us. Damn it, Proxima *ought* to exist. Who the hell has the right to take away man's nearest star – the dreams of my boyhood – and, worse, to render my mission meaningless, a vain flight in pursuit of a mirage?

I remember the day I was given the grey star on my palm, a mark that I was too old to be given a job rather than some younger person. I marched to the welfare office and I wore that star with pride, damn it. I still have it here, a hundred AU from Sol.

But it got worse.

The life-extending technologies, like telomerase, started to be withdrawn. And they introduced the confiscation of assets at age 80. Of course we'd have voted it down, if they hadn't taken the vote away from us first, along with our drivers' licences. Disenfranchisement and enslavement. What kind of society supports *that?*

We bore it all. It was a bad day, though, when they broke up the nursing homes and retirement communities, and forced us all into the grey gulags, all of us whose families would not shelter us.

We watched that shoot-out in West Virginia, a bunch of stay-put old soldiers pitting themselves against the FBI, and we cheered ourselves hoarse.

In the end, of course, we couldn't win.

When we didn't die off fast enough, they went further.

It was a couple of days after we lost the sun that the biotech module blew. I was in the base block at the time, changing carbon dioxide scrubber canisters.

There was a thud, a groan of strained metal, a flurry of red lights, a wailing klaxon.

I did what I was trained to do, which was to stay absolutely still. If there was a bad leak the air would gush out of the ship, and my ears would pop suddenly and painfully, which would be about the last thing I would know about.

To my relief I could feel the leak was a slow one.

And then Gurzadian came barrelling past me, pulling his way to the transfer node. When we got there he began pulling out the cables and ducts that snaked into the biotech module, because that, he said, was where the leak was, and we had to get the hatch clear before we could close it.

It took half an hour. Lousy design, I guess. Gurzadian said he'd been *expecting* a seam to blow for a couple of days. *Geezer* was being crushed by those damn spacetime stresses. I just watched the barometer creep down to the 540 millibar mark, where we'd start to lose consciousness.

Then the power failed, all over the ship. Dim emergency lights came on, and the cabin lights and instrument panels went dead, and the banging of the pumps and fans fell silent.

My ears started to pop again, and I could feel my lungs pulling at the thinning air. Some seam had split wide open.

Gurzadian pulled out the last cables by main force, and dived into the biotech module. Before I could stop him he pulled the hatch closed behind him, and held it there until the pressure difference forced it closed. There wasn't a damn thing I could do to get it open.

I worked fast. I got that transfer node sealed off, suited up, and went in after Gurzadian. Too late, of course.

The Demograph Draft put us back to work. But it was work you wouldn't want to expend a young life on, or even an expensive qubit AI.

So you had spry 80-year-olds riding plastic cars across the Mid East deserts, clearing mines for the combat soldiers marching behind. You had 90-year-olds in flimsy rad suits going in to clear out Hanford, and the closed Russian cities near Chelyabinsk and Tomsk where they used to manufacture weapons-grade uranium, and so forth.

You had centenarians sent off in one-way Rube Goldberg spaceships to the Moon and Mars and the stars.

But if you were too frail, if you failed all the suitability assessments, there were always the happy booths, a whole block of them in every grey gulag. The final demographic adjustment.

Here's what always brought tears to my eyes: the fact that we always marched into the places they sent us – even the happy booths – singing and waving and *smiling*. Mine is a generation that understands duty, a gen-

eration that risked their lives over and over to leave a legacy for our children, and we are doing it over again now. You can call that a small-town value if you like. The first American astronauts all came from out-of-the-way communities, and small-town values marked us out. It seems to me that values diminish in proportion to the growth of a community, which explains a great deal of the world we see today.

In my opinion it was those core values which led Gurzadian to sacrifice himself for me and the mission. And I would have done exactly the same for him.

I wrapped him in his country's flag and said a few words. I pushed him out through a science airlock. I could see him receding from the ship, into the darkness, lit only by the lights of the cluster. Just before I lost him he became a smudge against the grey stars, smeared out by the funny space around me.

I grieved, of course. But I won't dwell on the loss. Test pilots have always been killed with regularity. And that, whatever the designers of this mission intended, is what we have been: the test pilots of man's first starship.

I went through Gurzadian's stuff. It was like when Jenna died. All his jumble and clutter was where he left it, and when I sorted it I knew he was never coming back to disorder it again. I found a couple of last messages for his family – a handful of grandkids – and downlinked them, in hope.

I moved into the base block, because that's closest to the ship's centre of gravity, and it's about the bulkiest piece of shit anyhow. It should survive the space-time stress longer than the other modules. If anyone wants my skinny ass because I gave up the science programs, they can have it.

A couple of days ago I heard a bang, which could have been the materials science module failing. But the instruments in the astrophysics module are working still. I can even get an image out of the Cassegrain.

All I can see is grey light. Quasars.

Here's what I think.

I think I'm coming out the other side of the barrier that surrounds the Solar System. I think I'm seeing the universe as it really is.

Young. Still in its dark age, just as Gurzadian described it.

We – the Solar System – are stuck in some kind of M-theory bubble. What we see from the Earth, looking out through the enclosing barrier, is an image of a much older universe. But it isn't real. It can't be.

I think this is all some kind of experiment. *Somebody* out there in the real, young, dark-age universe is fast-forwarding a chunk of space, to see how it all turns out. And we live in that chunk.

I like the irony, incidentally. Here I am, the first star traveller, sent out here because I'm an old and useless fucker. And yet I find the universe is younger than anyone thought.

Anyway that's your resolution to the Fermi paradox, Gurzadian, old buddy. *They* were here all the time, all around us. Playing with us. I wonder what they think of us, of a society that sends its old people out to die in the dark, alone.

I've considered cutting this short. I have a number of options from the medical kit. Or I could simply open the



hatch. Sitting in this metal tube and waiting for the walls to cave in doesn't appeal.

It's time to get off my soap-box. I had the great good fortune to participate in a common dream to test the limits of mankind's imagination and daring. It is, I hope, a dream I have passed on to those who read this account. The stars may be gone, but we still have the sun and its children; and what lies beyond this barrier may be far more strange and wonderful than we ever imagined.

You see, I've come to think this bubble around our universe is maybe some kind of eggshell we have to break out of.

Or maybe it's no coincidence that we've gotten stuck like this just as we develop a space-bending star drive. Maybe this is flypaper.

Whatever, I'm confident that someday – in bigger and better ships than *Geezer* – we'll be able to break out.

I will say that we are not the same America I grew up in, but we can be again. Maybe the making of us will be the challenge of taking on whoever it was dared to put us inside this cosmic box.

I've decided I will stick around a little longer. Maybe I'll luck out and see the first stars come out, that Christmas tree light-up Gurzadian talked about.

I always did like Christmas.

Stephen Baxter's latest novel is *Moonseed*, forthcoming from HarperCollins in August 1998. His story "Moon Six" (*SF Age*, March 1997) is short-listed for this year's Hugo Award – and he is the only British contender on the fiction ballot this time around.

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WALLPAPER

Susan Beetlestone

My husband first began fading away in the early autumn. Sunlight, gold and intense, illuminated the living room wall. Alastair was talking to me – I can't remember what about, I was having trouble hearing him – when I noticed that I could see right through him.

I always hated that wallpaper. Great bunches of pink moss-roses. I'm not a lover of pink, or roses, but Alastair's mother picked it out and insisted that it perfectly complemented the room and the furniture that she wanted Alastair to buy. So we had the damned wallpaper, and now it seemed to be sucking her son into it.

I looked away, shook my head and looked back again. There was no difference. Alastair was still talking and I could still see roses faintly through his body. He was like a double exposure.

I soon found that it was not just Alastair who was becoming more insubstantial, but all human beings. Objects, animals and plants remained as solid as ever, but walking down the street I noticed that all the people were about as opaque as thick fog.

Holding up my own hand to the light, I blotted out the sun. I was the only person to retain my substance.

Of course, I thought I was going mad at first, but it was too orderly and uniform a progression to be madness. Surely if I had been suffering delusions I would have faded out only those people who caused me distress, not the entire world.

It got much worse. Each day people became thinner in substance, more and more like voile curtains, ineffective for blocking out the light. And with their substance their voices also faded. I could not shop for food any more because I could not hear what anyone said to me.

Explaining to Alastair was difficult. (Difficult enough to explain anything to a shadow.) How could I tell him what was really going on? He would certainly think I was insane.

One day I allowed him to take me out in the car, though it was hard to have any confidence in the ability of a whisp of mist to control several tons of speeding metal. Then I saw the other thing beginning. Buildings were starting to crumble. A brick askew, some slates loose, a crack developing. Things I would normally notice without concern, but now every building we passed had some defect, even the newly built housing estate.

We stopped at the doctor's surgery and I went inside with my husband. The appointment was obviously for me. He must have got tired of doing his own shopping and of going unheard.

Shaken by the decay spreading to things other than people, I decided to ask for help, or at least an explanation. The shadow of my husband at my side, the shadow of Dr. Wallace before me, I at last let go.

"Doctor," I said, "can you see me clearly, can you hear me clearly?"

I believe he said that he could.

"Because, Doctor, I can barely see you at all, or anyone else. You are all just see-through shapes, like so much coherent steam. And I can't hear what you say, just faint whispers.

"I can hear the birds sing, and the cars go by, I can hear everything but people quite as normal. Except that the buildings are starting to crack up now. What is going on, Doctor?"

He gave me an examination; eyes, ears, blood pressure, the usual. He asked me questions that I could hardly answer because I could hardly hear them, although he did resort to scribbling on a piece of paper, but his handwriting was scarcely more legible than his voice was audible. At last he began to talk to Alastair. I think I heard the word "neurologist," but it may have been "psychiatrist." I prefer to think it the former.

We went home, and I declined to leave the house again for a long time. From the windows each morning I saw the houses crumbling all around, while their shadowy occupants seemed not to notice. Only my own home was immune, staying in perfect repair, the way Alastair liked it.

I no longer cooked. He did all that. Food appeared on the table at mealtimes and I ate it. The second plate was also cleared, but by now Alastair and everyone else had faded to little more than outlines containing a slight refraction of light, as if weak lenses in the shape of people were moving about.

A rusty ambulance came to the house one day and I felt faint flutterings around me, the outlines of three or four wisps as well as the familiar shape of my husband. I knew what was going on, but they could not see what I could see. How could hospital help?

I said, "How can a rock be moved by a breath of air?"

They stopped their whispering and fluttering and went away.

At last, even the outlines vanished. The noise of the human world ceased altogether. Vehicles stopped and began to rust. Houses, except for my own home, were no more than piles of rubble.

Food continued to appear at the table, though I never saw how it got there. Two plates always. Some vapour that had once been my husband was dutifully feeding me.

One day I could not stand it any longer, looking at the rose wallpaper alone, so I walked out into the ruins.

I walked and I walked, scrambling over rubble, through brambles that had sprung up to cover the remains of the old world until I came, with a shock, upon a house that stood whole and complete, even its nice little garden with winter flowering pansies in neat rows of purple, yellow and white.

I believe that I had begun to head out into the decaying world in a last attempt to discover what was happening, or, failing that, to embrace the decay. Away from the only apparent source of food in my world I would soon have died. I do not know what I expected to find out there, but this neat little house was not it. So suburban, so precise, tucked among the ruins like a lawn on a scree slope.

Fear used to be a part of my life, but with all that had happened it seemed to have left me. I approached the house without hesitation.

The outside of the garden gate was dusty and covered in cobwebs, but the latch moved freely. It was bolted, though. I reached through the berberis hedge and, fumbling, pushed back the bolt. It gave a loud clack!

My coat was thick enough to protect me from the berberis thorns, but when I withdrew my arm, I saw that it was torn here and there. That annoyed me. I was the only person left in the world and yet there were still gates locked against me.

Inside, the garden was tidy, the grass still short from the last cut of the autumn, and there was no trace of fallen leaves from the few small trees. The only discordant note was struck by a mound in the lawn. It was, curiously, about the dimensions of a grave, with the turf patched back over it, not quite fitting, brown earth showing through in irregular lines.

"Get out of here unless you want to end up like that too," snarled a female voice.

She emerged from the kitchen door, a small figure dressed in an exercise leotard, a coat thrown over her shoulders and a .22 air rifle aimed at my head.

"Excuse me?" I said, in my best middle-class manners tone of voice. At times of crisis I find myself imitating my mother-in-law – a loathsome woman who always got her own way by shaming the world into submission. "I'm terribly sorry, I would have come to your front door, but the circumstances being what they are, I didn't actually expect anyone to be at home. Everyone else vanished about two months ago."

"Not quite everyone." She kept the gun levelled at me.

"Evidently not. Did they just fade away for you, too?"

"You needn't think I'm letting my guard down."

"Um, of course not. Well, I hoped for a cup of tea and something to eat, but since you feel that way, I'll be going. I was only trying to find out what was happening."

I turned to go.

"You really haven't a clue?"

I looked back at her and shook my head.

"Come on in then, but be careful."

Her house was as normal as mine, if less tasteful (all ruched curtains and stencilled walls). She made tea, keeping her gun by her side. How, I asked, could there still be electricity in our houses when the rest of the world had fallen down. She didn't know. Instead she offered me cakes.

"My husband baked them."

"Your husband? Where is he?" I looked around as if I expected to see him.

"Well, you know, food gets cooked. It must be him. I can't see him, of course."

"Oh," I said. "Yes."

"Perhaps he's a ghost," she giggled, slightly hysterically.

"The, em, mound in the garden?"

"That's not my husband," she snapped.

"Oh, I didn't mean – I was just wondering."

"Another woman. Like you. She came here and tried to steal my home. I had to kill her to survive. Everyone else has always been stronger than me. Now it's the other way round."

"Yes," I said. "I understand."

I gazed at the bows and birds stencilled in gold on her orange living-room walls and thought of my own home. The orange started to bleach away and pink moss-roses emerged faintly. The woman picked up her gun with a roar.

"Stop it, or I'll kill you!"

I jumped up, spilling my tea.

"I'm sorry, I didn't know –"

Orange filled the walls again, but there were occasional gold roses among the bows and birds. A sudden cold gust of dread blew through me.

"I have to go home," I said.

I ran, struggling over rubble, past rusted cars and vanished landmarks, then I staggered on and on. It was dawn the next day when I found my way home, but I was too late.

Not a wall still stood, no two bricks one on another. My house was gone and with it the last breath that might have been Alastair.

I dug among the fallen, rotting planks that were once the garden shed and found the axe. Alastair had used it once, to cut down a small tree. He was a careful man and had put it away sharpened and oiled in a cloth. It had not one fleck of rust on it.

I was tired and hungry, but for now I wanted to survive. Survival was all that was left for me. I turned and headed back to the house with the winter pansies.

Perhaps somewhere the world I once knew still exists. Alastair visits his mother three times a week and wonders what happened to me. I don't know. All I know is that Spring is here. The rubble that once was houses as far as the eye could see is more broken into tiny fragments, levelled by some force I do not understand and covered with brambles and small saplings. Old apple trees once in gardens are now blooming, promising fruit for the Autumn.

I am growing fond of the pink moss roses on the walls of this house, which is something like my own and something like another place. The smell of freshly-baked cakes fills the house and I thank my attentive ghost, and wonder if he has noticed any of the changes.

Susan Beetlestone has published three previous stories in *Interzone* – "Face Lift" (issue 26), "An Artificial Life" (issue 34) and "Heart of Santa Rosa" (issue 38). It has been a long wait for a fourth, but in the meantime she has become the mother of two children. She and her family live in Birmingham.

TAKEOVER

Michael Iwoleit

He was one of a million germ cells in the extra-uterine placenta. As the first month passed and he grew from zygote to foetus, countless others separated from the matrix in the levels above and below him. Like muscular contractions, waves regularly struck the gel, carrying a rich syrup of amino acids, nucleotides, carbohydrates and oxygen. As his cells differentiated into nervous system and organs, into head, trunk and limbs, enzymes poured in from the matrix, modifying his genetic code. In the fifth month a membrane began to enclose him in a kind of chamber. It would be his home and his vehicle for the next four weeks, taking him from the place of gestation to the place of birth.

Signalling hormones etched pre-neuronal paths through the chamber. As the neurons came to life, his first sensations were of warmth, dampness, twilight. With twitches and jerks his autonomic system readied his muscles, tendons and joints for the strains of his coming birth. He fumbled through a gluey void, touching the membrane's tiny bumps. The blur before his eyes took on contours. He began to distinguish between the amnion in which he floated and that which lay outside the waxen sac. In the final weeks, bundles of axons spread through his scalp, forming nerves as they branched, enriching and sharpening his perceptions.

His chamber detached from the matrix. It ploughed through the gestation beds, over steep ridges and deep plains, to where the matrix opened on a vast crystalline plain of hexagonal cells: the place of birth. The chamber slowed, put out pseudopods, and followed a chemical trace to its destination. Beneath the plain an ocean of silicates bathed the empty cells, preparing them for new foetuses. Here and there chamber lids buckled and burst under the pressure of swiftly growing crystal columns, within whose translucent walls human shapes could be seen. Where the columns broke through to the outer world, sunlight danced across the optocybernetic birth-place.

The chamber settled in a region kilometres beyond the most populous part of the plain. It oozed a corrosive liquid that etched a channel in the crystal, whose sharp edges tore the membrane and released its contents. Fluid rushed and flowed through channels to the ocean, while the residue hardened around the infant in a brittle husk. Kicking and wailing, he drew his first breath. Weakened by the rampant growth of his brain, he soon became less active, and his sleep cycles shortened to suit the brain's needs.

As thousands of his neurons attached their delicate synapses to the crystal wall in order to transfer their genetic data to its replicative mechanism, his senses returned for a few days to their initial level. The chamber again seemed a place of weak light and warm breezes. Beyond its walls the hexagonal pattern blurred and receded as the column grew upwards. When it tore through the roof into daylight, he barely knew it. His atrophied eyes, ears and tongue were as vestigial as the gills of an embryo, overwhelmed and displaced by his brain's growth. After a blank time, he felt the birth pangs of new sense organs in bell-like melodies, flashing lights and sweet tastes.

At the neuronal interface his DNA, releasing energy quanta as it replicated, wrote genetic data to the crys-

tal – data unintelligible to the organic parts of his body. One half of the crystal was transformed into a net of optical transistors, the other into a mineral exoskeleton. His mind spread through axons and crystal into the growing shell. Fluorine and carbon atoms diffused out at the surface into fluorinated diamond foil a few atoms thick, which dissolved in the hot air. Soon, at the top of the crystal column, a billion nanomachines were swarming and polymerizing surplus atoms into carbon-chains with pyridazine rings as switches – a mechanical analogue of their host's optical computer, powered by static discharges. As the base of the column atrophied to a polysilicate skeleton, the nanomachines grew pincers, grippers and propellers, and began to catch passing dust motes.

The top of the crystal column had penetrated the roof, where a network of steel and aluminum cables surrounded the flat dome of the breeding complex in a broad ring. Infants nested in its recesses. Gusts of wind thundered through the shafts and corridors. Fibreoptic bundles and power plants signalled in coloured patterns. Far away, laser-induced fusion reactions flared periodically. Photocells at the top of the column responded to these signals and sped up the work of the nanomachines. Within two days they had created from dust a steel and aluminum ring around the infant's capsule, three struts to hold it fast to the net. Far below, the skeletal remains of the crystal column crumbled back into the dome, where the ocean's current washed them away.

Meanwhile, the infant felt nothing. In the capsule, his organic body had ceased to grow. As the exoskeleton's operational and material changes impinged on his blood circulation, the neurons read out genetic data, setting off polymerization all through the exoskeleton's crystal lattice, freeing molecular oxygen to inflate condensed beads of silicon into sheets, which were then etched by lasers into holographic storage devices. Soon there was a brisk flow of data between the mineral and the organic parts of his body; as the data was decoded, the silicon was imprinted with the outlines of his personality. Shortly before the nutrient supply to his brain was used up, tubes entered the capsule and connected it to an external supply.

He was still preconscious. Knowledge and speech would remain latent until he entered the virtual universe. With his organic senses atrophied, his brain hallucinated: kaleidoscopic patterns, tones of every pitch and loudness, warm and cold showers, sweet yet foul scents – all bodiless.

Far below him, gashes opened in the opalescent roof, among the ruins of the fallen columns. To the south, the roof abutted a steep cliff where foaming phosphorescent waves surged, 80 metres high. Plastic reclamation grids covered the ocean's surface to the horizon, studded with dredgers, conveyor belts, fibreoptic nets, and covered with a film of biochips. To the west, servomechanisms climbed rock slopes to a maze of buildings that stretched into the distance.

He saw none of this. The dendrites of the fibreoptic net fastened themselves to his exoskeleton and sent impulses into his cortex. His autonomic system responded, put him through a brief birth trauma, and inserted his mind into the virtual universe.

At first it was a swarm of particles, bodiless perceptions, in which some hint of his future self dawned. His consciousness had not yet parsed this world into discrete sense impressions. Instead of aromas, sounds and light there was only a whirling, ethereal medium, where traces of consciousness shot by like sparks. As a shapeless mass with shifting borders, as a mist of vibrations, he rushed through the void without moving, he felt impulses storm through him and he remained numb, he touched structures that were void. There was, in all this Nothing, a single fixed dimension – time – in which his self grew firmer, clearer, sharper; in which he condensed to a pellucid formula, and made the most basic of distinctions: the self that perceives, and the world that is perceived. This world was both stubborn and yielding. His first efforts to find its limits met with no response. It absorbed his swelling, his trembling, his whirling, without resistance. The void, the silence, the night whispered, quivered and flickered ceaselessly yet remained dumb, stiff and dark, giving him no purchase. So he turned his attention inward, to the point-sized abyss within him, from which something rose to the edge of his consciousness, lightly pressing, softly humming, tenderly breathing, a first thought, first word, first knowledge, a memory. He felt it as a foundation, beneath him and throughout him, of a size he could only guess at. It radiated a weak light and warmth, and spoke with a soothing voice. At some point the voice took on a quality that wakened new senses within him. This monologue seemed to have no start and no end, but it changed by insensible degrees. White noise modulated into ever clearer rhythms and phrases, whispers gained resonance, losing all harshness and roughness, and after eternities turned into a warm voice that touched him deeply, a voice that knew and accepted him and gave him the confidence to grow. The voice became the main thread of his being, on which all other experiences hung like beads, rubbed together and wore out. The voice created faults, fissures and cracks in the void, wresting structure from the aether, splitting vibrations into a rainbow of stimuli – the prototypes of colours, smells, sounds and tastes. These concussions also revealed structures in himself, let him perceive his extent and his volume, the veins, arteries and circulation that absorbed only certain things from his surroundings. At first the voice was merely a disturbance in an ocean of sameness. Then, as syllables, words and phrases became more expressive and dramatic, they seemed to awaken memories of previous knowledge. He learned to associate its sounds with colours, noises, pains, resistances. He learned to link them so that they seemed to foreshadow new meanings and experiences.

In this phase he realized the true extent of the foundation on which he rested, and in which he was rooted. It was like a great building, a net, an endless web of interconnected words, symbols and meanings that he need only pry open to learn more. The voice, he understood now, was reciting fact after fact in a loose, disorderly series, explaining places, stimuli and experiences that were both known and unknown to him. He always understood a little more than it told him, as if the knowledge was latent in him, and needed only a key to be set free. He discovered the power of his mind to place himself in simulated or future situations. He was told

of others like himself, and of the material limitations of earlier epochs, which they had transcended. He soon understood how to use this power to transform his environment, to fill it with images of his own creation. As he came into his full potential, the voice lost its purpose and gradually faded. At this moment he became aware of the community that had already welcomed him, millions of individuals like himself, iridescent waves of sound which he sorted, smells which he sifted, thoughts which he could read, nodal points, geometric shapes, wavecrests in an immense space that shimmered with shapes coming into being and passing away. And he grasped that this, as the voice had told him, was humanity in the age of imagination.

From the beginning he was the centre of a particular attention. He felt touched and whispered to by others, who were shy and curious near him. They didn't speak words, but cajoled him with abstract images and calmed him with formless whispers. Like himself, an inchoate sphere, they never took on concrete form, but he learned to tell them apart by the ways they expressed themselves. Around some, space exploded in pictures of the earlier, material human history, landscapes rising and falling in storms of noise and colour. Others filled the Nothing of the aether with dim refractions that trickled pleasantly into his outer layer. Still others clearly strove to use no words, and remained faint in all other expressions. Soon he overcame his shyness and actively took part in their games. With dozens, sometimes hundreds of others, he modelled landscapes, improvised three-dimensional analogues of mathematical theories, played one of innumerable instruments in a colossal symphony. He heard the first words since his maturing as a scrap of melody, a warm breath near him. He was content; he no longer felt shut out. With these billions of swarming essences he had found his nest, his haven. The respect and discretion of the others confirmed his presentiment that, of them all, he was special.

The untroubled time that followed permitted him to assimilate his experiences. A complex system of vibrations sometimes joined with him or drew him in, and it was easy to grasp what it said. Certain other individuals also joined it, and in them he recognized something of himself, above all a particular fund of diverse knowledge and ways of expressing it. He quickly grasped that they were destined, indeed created, for a particular purpose. Their teacher, a complex of information that had been assembled over centuries, told them of an epoch, though it surpassed their imagining, in which humanity had been subject to the laws of a physical world, rather than a world unto itself. It strained their understanding to learn that this physical world still operated. Millions of individuals could be annihilated when parts of what their teacher called "hardware" failed. They were astounded to learn that their virtual universe could not grow boundlessly, since the hardware on which it was based was limited by the surface area of the planet. No equations from quantum theory could have seemed to them more curious or abstract. Material concepts like exhaustion, economy, error, or expense were to them tumours of thought, logical paradoxes with no practical meaning. In their view the mission to which they were assigned – the exploration of another planet, of a physical celestial body – was foremost an intellectual adventure. So their teacher's remark that they were uniquely privileged to be able to see, feel and smell something that really existed (whatever that might mean), was met with incomprehension. Even the process by which they would be transformed into exploratory bioprobes seemed little different from the virtual imaginative techniques they already knew.

He was an apt pupil, and quickly forgot the pleasures of the virtual world. Their teacher's explanations of the mission, the data to be gathered, the procedural methods, found fertile ground in him. With each new bit of information, he was aware of how his innermost being, his very nature, was tuned to the mission.

— We observe, his teacher explained, that on the main continent an evolutionary gradient runs north-northwest from the southeast peninsula. Samples from our robot drones show evolutionary stages occurring in a distinct sequence, as if time had been spatialized, from geochemical precursors in the southeast to primitive organisms in the north. It appears that evolution started at different times, or progressed at varying rates. You will land in the southernmost region, where you will study the primitive mineral pseudo-genes that are precursors of organic life, and proceed to the subarctic zone, where our knowledge is incomplete, and where life's molecular building blocks must be long separated from their precursors. Conditions resemble the primal atmosphere of Earth. As we move upwards along the gradient, we will have a unique opportunity to study how organic molecules evolved, the origin of RNA and its autonomy, and the development of the genetic code.

— So far we have only a hypothesis about these unique conditions. Observations suggest that the small, massive, rapidly orbiting moon of the planet creates a tidal belt that may influence geological processes. Simulations show that this belt changes its angle of inclination to the planet's surface in a cycle of millions of years. Where its influence is strongest, it blocks all prebiological processes. As the belt precesses toward the equator, the northernmost zone is freed to evolve an elementary biochemistry. The southeast's evolution lags far behind it. Life on this planet will never evolve beyond primitive prokaryotes, because in another million years the tidal belt will return to wipe out any organisms that may have formed...

In a resource- and energy-rich region of the continent-wide factory of columns, unusual activity began. Around a shaft that reached the open sky, a corrosive wind blew from powerful vents, staining the metal. Spines sprouted from the patina, branching and budding, swelling to cup-shaped blossoms. For kilometres around, they fused with neighbouring blossoms to form chutes and tunnels. Soon these steep paths connected the infants' capsules to the shaft. The acid wind reacted with the skin of the capsules, and a peculiar symbiosis started between the quartz and the supports. Spidery legs and claws extended to the mouths of the chutes, pulling the capsules free of the netting. Meanwhile, at the base of the shaft was a glowing smelter, from which titanium-alloy slag was scooped by magnetic fields into forms left to cool on the walls of the shaft. In the projectile so formed, servomechanisms clambered, building a smaller payload cylinder. The work was barely

finished when small spidery robots came swarming from all sides, searching for a place to settle in the cylinder among the water, oxygen and nutrient tanks.

Alone of their generation, those selected for the mission regained the autonomy of their infancy. Their connections to the fibreoptic net were severed, their participation in the virtual universe cancelled. They slept dreamlessly in their new bodies. While their vehicle was completed, their waited for the moment when the myriads of data and instructions in their organic and cybernetic memories would be set free. Their new limbs grew further, splitting and subdividing into a fringe of fine thread that enveloped the capsule. From the crystal hull buds sprouted, breaking through the fringe and merging with it into a mass whose potential growth awaited the proper conditions. A single bioprobe had at its disposal more data about the universe than millions of human beings. In the neurons and genes of its organic body was stored a template of the entire history of life. Their mission was to observe that history. It would be their last.

The journey of 14 light years lasted 84 years. Time meant nothing to the bioprobes' dreamless minds, chilled almost to coma in the payload of the immense solar sail. As it entered planetary orbit, the payload cast off the sail, and the revived bioprobes spilled in hundreds from its bay into the alien atmosphere.

He landed under a collapsing parachute on a sandbank. A river roared by, descending from a mountain range that stretched like a jagged line under towering clouds on the southern horizon. Lightning flashed through the clouds and mist. Rain pelted down in waves across the hot landscape. Beyond the valley, volcanoes glowed like distant ovens. The other bioprobes landed undamaged over an area of several kilometres.

In the years of travel through space they had come to full maturity. Exposed to the air, wind and rain, the downy shells burst open within days. The sensations that reached his virginal senses reminded him of his infancy. The first light, the first drops of rain, the first breath of cold, overwhelmed his memories of the virtual universe, pushed them into the background, and brought him completely to the here and now. He became one with the place and his mission. His body and his being breathed with new urgency. A continent of knowledge stretched before him, and he switched on his communications link to contact his companions, floating down over the landscape like hundreds of grey flakes.

— We have arrived at the null point of evolution, some hundred kilometres north of a mountain range near the tidal belt. Volcanic activity demonstrates the geologic influence of the moon's tide. The atmosphere is a mixture of methane, ammonia and hydrogen, with traces of oxygen, carbon dioxide and inert gases. In the cloudbank over the mountains, lightning is creating simple organic molecules. These will be carried by the rain into the valley. The rivers also carry materials that crystallize out as clays.

— I will proceed north up the river. The river itself is too acid and too poor in minerals to permit synthesis of clay, but its sandstone banks are ideal for the process we wish to observe. They flood during storms, and then dry out, favouring the growth of clay crystals. Here we may expect to find the distant forerunners of organic life.

Moving, for the first time ever, he suffered the burden of labour. He felt his exoskeleton with an intensity he had never dreamed possible. Now he understood what it meant to be a slave to physical law. On the countless spindly spiderlegs sprouting from his downy shell, he dragged himself metre by metre up the riverbank. By day he felt scorching sun, by night an icy wind. Air sieved in through his pores, water through his tubules. Torrents of rain blurred his vision. Through the hazy air, stars wavered above. On his claws he grew microscopic eyes and feelers, chemical instruments that told him the composition of the river water. Every bit of information cost hard effort. It took some time until he no longer suffered every motion of his body. After a week and some dozen kilometres, new robot legs and arms had grown. He moved with more sureness and strength, and had to suppress his jubilation.

But he felt none of his deeper processes. From the moment that his life support system could absorb and convert gases, liquids and minerals, the circuits of the shell had fired off impulses to his nerves, altering his DNA, and finally had taken hold of entire cells. The information hidden for so long in his genes was being read out, setting off a firestorm in his synapses. Idle parts of the optical computer came to life and took over the exoskeleton. The metal and fibreoptic blanket that clung to the robot legs could now be used as raw material. The metamorphoses had begun.

Once he had mastered the flood of sensory data, his entire attention was directed to the traces of life he hoped to find in the sandstone of the riverbank. But he took time to contact his companions.

— In the fissures, cracks and pores of the riverbank each new clay crystal can be washed away by the next flood. Those that cling to the sandstone survive. They grow and divide, their offspring inherit their structural properties, and selection continues. As new pores appear, new crystal structures with more complex properties are selected to occupy them. On my way north I should find clay proto-organisms in increasing number and complexity.

The river wound up between two mountain ranges at the head of the valley, swollen by tributary streams. Its banks were piled with moraine debris, but that was no obstacle. The bioprobe strode confidently over the debris on his new limbs – three pairs of pinnapeds, laterally segmented legs and two long mandibles. He had grown new eyes as well. They compensated for atmospheric distortions and gave him a clear view of his surroundings. In the rushing of wind and water he heard unsuspected nuances. Analysis and understanding became one. He could easily view the landscape in infrared, or look microscopically at cracks and pores in the sandstone. He needed only to put a feeler into a substance to know its composition.

Now all the bioprobes had landed, and their voices filled the aether. Early landers directed the stragglers to staging points, where they followed up the research of the pioneers. Only a few had the privilege of following the evolutionary gradient up to the point of the genetic takeover. He was one of them.

— The population increases, and the competition.

Some clay crystals have begun to enclose a space where the local acidity favours the formation of secondary clay types. These in turn improve the adhesion and porosity of the crust, giving a distinct advantage to the two-component system. The trend is clearly in the direction of higher complexity.

By now encyclopedias' worth of data had been read from his genes, changing him from a shaggy, awkward pupa into a supple steely-glinting being that easily scaled the cliffs of the riverbank. His body was segmented like an insect, spotted with solar cells, faceted eyes and spiracles. His feelers moved ceaselessly over the ground, sending floods of information about the microclimates of the crowded crevices, their chemical composition, temperature and pH. To keep him from being overwhelmed by data, parts of his hardware began to process information on their own, and only the most important results reached his conscious mind. His communications link went to higher power, enabling him to speak to the orbital relay station.

The bioprobes now resembled slender beetles, feeling their way over crevices, cracks and puddles as if seeking food. The next stage of their metamorphosis was already visible. From two recesses at their front grew armoured bumpers that could push away obstacles, and the segments of their underbellies were reforming into treads.

— The crystals have become home to a multitude of organic molecules. Amino acids, formic acid and oxalic acid increase the solubility of metals and catalyse a new generation of clays. Heterocyclic bases and polyphosphates cling to the surface improving the properties of the crust. Other molecules impede growth on cracks and determine the shape of the crystal. The crystals have already developed many complex phenotypes, of which the most suitable survive.

The researches of his inorganic body went on, increasingly independent of his consciousness. At first he failed to notice that one bodily function after another was slipping from his control. He became a spectator to himself, observing with astonishment how his legs scuttled to evade currents near the riverbank. His perceptions flattened. The steep cliff walls seemed to swim in a fog. He could no longer sense temperature gradients. Discrete smells were absorbed by a single musty odour. The voices of the other probes faded. Though he continued to send his results to the orbital station, his last report would be made by processes unknown to him.

— Now we observe the formation and binding of RNA: the negatively-charged phosphor-sugar spine fits to the positively-charged edges of the clay. Organic bases slip between clay layers and read the information at the edges. Inside the clay, the RNA develops into a self-replicating molecule, a secondary genotype for natural selection. Those strands which carry the code for suitable enzymes and proteins begin to dominate. The clays still serve as catalysts, but later the RNA will make its own enzymes.

Genetic activity in his nuclei slackened. His organic storage was depleted, the cybernetic filled. Almost all of his extracortical nerve cells shrank and detached from the crystal surface. The tubes that had supplied nutrients cut off their supply. Wastes were no longer carried away from his body and began to poison him. His perceptions ebbed and he sank into sensory deprivation, hearing only the echo of distant sounds, vibrations as of the rising and falling of heavy masses. Helplessly with his dwindling strength he tried to send a last report, but even his voice was no longer his own. The few word fragments that got through to him merely anticipated what he wanted to say.

The moment of takeover: the RNA has developed its own phenotype, producing simple enzymes, sheath- and connecting-proteins, proving itself viable outside the medium of the clay crystals. Soon organic lifeforms will surpass the mineral competitors with their greater adaptability. The quantum leap made, it is only a matter of time until the puddles on the riverbank swarm with one-celled life.

The moment of takeover: two months after landing, the bioprobes reached the north end of the evolutionary gradient. Under a cobalt blue sky they ploughed through the shallows of the riverbank, their tonnage crushing rocks and boulders on their way to the sea, like great iridescent beetles on treads, driven by turbines, crowned with the garland of a thousand feelers twitching in the air, lashing through the water, fingering the ground; like harbingers of the lifeforms to come they invaded the delta. For some the journey ended on the western crags. Others made it to the beach, where they witnessed how life swarmed into the sea.

The leading probe rid itself of its ballast; through an opening in its hindquarters it expelled a bundle of organic material into the river in a rush of blood and water. For a while the bundle floated on the gentle waves, washed onto a sandbank, then was carried away. It still lived as it snagged between two rocks near the river's mouth. The being stared at the sun from empty eye sockets under a burst cranium. In a pool of blood it let out a last desperate impulse to breathe for once on its own, to move its head as it willed. The hand twisted in a gesture meant for some other limb. The flayed body did not resist the cold and the sea for long.

Translated from the German ("Wachablösung") by Carter Scholz

(for David I. Masson)

Michael Iwoleit wrote the above story for a German anthology edited by Wolfgang Jeschke and published by Heyne Verlag in 1996. He says of himself: "I was born 1962 in Düsseldorf and still live there. Since 1989 I've been a full-time writer, translator and critic, and like most German sf professionals I earn my living mostly with translating (I'm German translator of David Wingrove's *Chung Kuo* series and worked with my friend Horst Pukallus on Iain M. Banks's novel *Feersum Endjinn*). I've written two novels: *Rubikon* (1984) and *Hinter den Mauern der Zeit* (co-authored with Horst Pukallus, 1989), a *homage* to Philip K. Dick set in a Germany of the near future. I've published about a dozen stories in anthologies and magazines and several long essays on sf writers like Dick, Ballard, Masson, etc., and on the themes of art and science (so far my essays are the most successful and recognized part of my work)."

ANSIBLE LINK



DAVID LANGFORD

I returned from an enjoyable stint as a US convention guest of honour – at Minicon in Minneapolis – to find people making doom-laden noises about the unwieldiness of the British national sf convention as membership heads past 1,000. Minicon, notionally a small, regional event which has been trying to slim down (daily newsletter: "Thanks to everyone who didn't attend this year") attracted 3,350 fans. Phew.

WILD DADA DUCKS

David Brin may not be entirely delighted that *The Postman* – the Kevin Costner film based loosely on a title by Brin – swept the Razzies or Golden Raspberry Awards (the anti-Oscars) in every category where it was nominated. This includes Worst Screenplay, Worst Song, Worst Actor, Worst Director, and Worst Picture.

Lois McMaster Bujold is quietly smug that the Mobile Robotics/Machine Perception Lab has named an experimental robot after her. (Another was named for Connie Willis.)

Stepan Chapman won the Philip K. Dick Award for best paperback original with *The Troika*.

Ellen Datlow, undeterred by the axing of *Omni* and her editorial post, has new plans: "I'm launching a webzine called *Event Horizon* [on] August 1st, with my former *Omni* colleagues." More sense-shattering details soon....

Lester del Rey's real name continues to excite controversy. Last issue reported how the long Anglo-Spanish name/title which he claimed had been shrunk by sceptical investigation to Leonard Stamm. But another old-time writer, Frederik Pohl, recalls a different version: "Back in the '50s he had this bullshit story, which he stuck to for the rest of his life, about how his own birth records got destroyed in the little known great Nebraska forest fire, or the devastating Minnesota earthquake, or whatever it was, and so he had to use his cousin Leonard Knapp's papers."

Terry Pratchett was 50 on 28 April, and two days later was lured to a surprise dinner party hosted by Transworld. The 50 guests included Christopher Lee, Tony Robinson and most of the usual suspects (and me, they let me in too). *Terry:* "It was a great evening.... The nice thing about your publishers giving you a 50th birthday party is that you then become 45, 10% having been withheld against returns." Meanwhile the latest Discworld map spinoff, *The Tourist Guide to Lancre*, was hastily withdrawn during distribution owing to production errors, and a corrected version issued. Fanatical first-edition collectors take note.

Alex Schomburg (1905-1998), the US illustrator and comics artist whose career began with cover art for Hugo Gernsback's *Science and Invention* in 1925 and extended to *Asimov's* covers in the 80s, died on 7 April aged 92. The 1990 World SF Convention honoured him with a Special Award.

Neal Stephenson has entered the post-cyberpunk era and publicly announced his reversion from writing on a laptop (which lost a wad of his unbacked-up work) to paper and a fountain pen. Not even a nanotechnological pen that synthesizes its ink from air pollutants....

INFINITELY IMPROBABLE

Nebula Awards. Novel: *The Moon and the Sun* by Vonda McIntyre. Novella: "Abandon in Place" by Jerry Oltion. Novelette: "The Flowers of Aulit Prison" by Nancy Kress. Short: "Sister Emily's Lightship" by Jane Yolen. Grandmaster: Poul Anderson. Vonda McIntyre was reporting the results live on-line, and in the excitement of that novel announcement found herself unable to type a recognizable "Yikes!"

Hugo Nominations ... are very voluminous. The Best Novel shortlist: *Forever Peace* by Joe Haldeman, *Frameshift* by Robert J. Sawyer, *The Rise of Endymion* by Dan Simmons, *Jack Faust* by Michael Swanwick, and *City on Fire* by Walter Jon Williams. In Dramatic Presentation, fans were stupefied by the absence of any *Babylon 5* episodes: the contenders are *Contact*, *The Fifth Element*, *Gattaca*, *Men in Black*, and *Starship Troopers*.

British SF Association Awards. Novel: *The Sparrow* by Mary Doria Russell. Short: "War Birds" by Stephen Baxter (*Interzone*). Artwork: SMS for *The Black Blood of the Dead* (*Interzone* cover).

Award Awards. The 1998 Ansible Link award for the column reporting too many awards goes to ... this month's. Once the unwonted flood of real news is over, it's back to the usual cheap wisecracks and smut.

Wrath of WFC. In a savage legal tussle, the 1997 World Fantasy Con obtained a County Court judgement – with costs – against Reading book dealer Christopher Barker, who had grumpily stopped his membership cheque after missing a late programme item. Chairman Steve Jones, we are unreliably informed, was restrained with difficulty from putting on the black cap.

Bram Stoker Award Nominations for horror ... again, the list is long. Novels: *Children of the Dusk* by Janet Berliner & George Guthridge, *The Church of Dead Girls* by Stephen Dobyns, *My Soul to Keep* by Tananarive Due, and *Earthquake Weather* by Tim Powers. The Clute/Grant *Encyclopedia of Fantasy* features in the Non-fiction category.

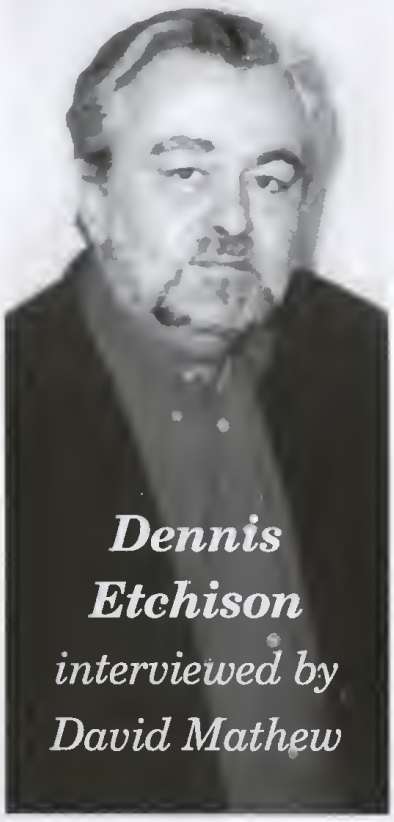
UPC Annual SF Prize: one million pesetas for best novella (25-40,000w) in Catalan, Spanish, English or French. Deadline 15 September. As usual, submission rules are slightly complex, requiring pseudonymous MSS and sealed envelopes containing true identities; if interested, e-mail me for details at ansible@cix.co.uk.

Eastercon 2000. The millennial British national sf convention is "2Kon," to be held in Glasgow at Easter: SAE for details to 30 Woodburn Terrace, St Andrews, KY16 8BA. (1999's Eastercon is "Reconvene" in Liverpool: 3 West Shrubbery, Redland, Bristol, BS6 6SZ.)

Sidewise Awards for alternate history: shortlisted "long form" items are *Time on My Hands* by Peter Delacorte, *Jack Faust* by Michael Swanwick, and *How Few Remain* by Harry Turtledove. "Short form" nominees include our own Eugene Byrne and Kim Newman, for "Teddy Bear's Picnic" (*Interzone* 122-123).

Thog's Masterclass. "In the Lauryad's control chamber, the victor was Understanding and it prevailed, buffing the environ with mollifying ease." (Vanna Bonta, *Flight*, 1995) ... *Dept of Metaphors for Oil Spills:* "He plopped the lighter back into the [gravy] boat, laughing as the butane oozed into the gravy. ... 'I'm not afraid.' Kolby seized the boat, pouring polluted gravy onto his mashed potatoes. ... 'Tastes like–'" Like normal gravy? Butane boils at -0.5_C. (James Morrow, *Towing Jehovah*, 1994) ... "Both the other Intelligence operatives turned to look at the sharpness in Samuel's voice." (Peter F. Hamilton, *The Reality Dysfunction*, 1996) ... "I felt a horrid, horrid chill as I forced myself to look into those clear, frozen eyes of my awful, awful grandmother." ... "Licking my fingers, he regarded me meditatively. 'It's something in the air – an exotic, erotic perfume you exude that makes me somehow wild.'" ... "Everything about her from alpha to omega was Greek to me." (Katherine Neville, *The Magic Circle*, 1998)

Arterial Motives



Dennis Etchison

interviewed by David Mathew

'Rather dark, depressing, almost pathologically inward fiction about the individual in relation to the world..."

Chain-smoking his way through a packet of cigarettes, Dennis Etchison is explaining the distinctive features of his fiction. We're in London, during one of Etchison's visits from America. He continues:

"I was an only child and I grew up probably less well socialized than most people with their brothers and sisters in the house. The first couple of years of my life, my father and all the men in the family were away in the war. I was raised by women – very spoiled. But at the same time I was more isolated from other children. You don't realize, when you're living through that, how not-normal it is. So my stories are about solitary individuals, trying to find a way to intersect with society. And I guess that's a metaphor for *my* life, for what I'm trying to do. The writing is just an encapsulated, melodramatized version of the conflicts I've had: trying to fit in. Any writer worth reading is going to talk about his own experience, even if he is writing fantasies...

"Henry Miller and Jack Kerouac wrote about themselves, but there are plenty of writers who would never give themselves away. You have no strong sense of who they are as people, and somehow they seem less interesting to me. The writers I feel the greatest love for in history, whether it's William Blake or Ray Bradbury, or Kenneth Patchen or Charles Bukowski, are writers who revealed the intense moments of their lives and the interior struggles they were going through. And offered it up in skilful fictional terms. I feel a closeness towards them; I don't know how else to put it. Even though you may never have met them, you feel a great loss when they die. It's not just that there won't be any more books or stories; it's because you have a sense that a beautiful soul has left the earth. Someone you felt kinship with, you know? The writers we have the highest regard for are the ones who revealed the most about themselves..."

Therefore, welcome to the Revelations According to Etchison. Few writers will reveal more about themselves than this man. After more than the obligatory few years of critical neglect, Dennis Etchison continued to be a whispered name for many years to follow. All the while he produced work that is now regarded as exemplary. He wins awards and high praise from other writers in the fields of the *fantastique*. Furthermore, I can verify that he is a wrestling fan, loves London, and can even interpret the map of the Underground with no problems. He once abandoned his car on the freeway when it died on him, and refused to drive anywhere for the following 15 years. He spent time in the L.A. County Jail in the mid-1960s for failure to pay parking tickets, and out of boredom asked if anyone on the cell block had anything to read. For a small fee he was able to rent *The Sterile Cuckoo*, and was told by one of the other inmates: "It's got a lot of big words in it – but it's about fucking, I know."

But these are other stories...

Despite Etchison's reputation as a writer of horror fiction, there is clearly another line of fiction which converges with the first. It is fair to say that he has been influenced as well by some of the American Dirty Realist writers such as Raymond Carver and Tobias Wolff...

"Yeah, that's fair. I began, for the first 15 years of my career, with what little reputation I had in the science-fiction field. I was in *The Magazine of Fantasy and Science Fiction* eight times; I was in *Orbit*; I was in *New Writings in SF* four times. I was in *Fantastic Stories* and other sf markets. Simultaneously I was publishing in slick magazines and some of the literary magazines. Eventually, with the horror boom that began with Stephen King, that field opened up many new markets and I found my work being accepted there. Since then my reputation has been in the horror field. My reading was always very wide. Probably my genre reading was in the minority. It seemed to me that there were literary values that were not being used by writers in the field. I try to bring those values to my writing. If you look at the anthologies I've edited, I think you'll see rather mainstream stories. It was always my intent to expand the boundaries of the genre rather than to define them more clearly. I wanted to break down the barriers between various kinds of literature. These distinctions are largely to serve the interests of publishers. Many people I know – intelligent, educated people – shudder when I offer them a book and say, 'Oh, I never read horror.' And I say, 'You don't know what you're missing. There're some really fine writers...' But in most cases they refuse to read it. If they were packaged simply as novels, as Peter Straub's *The Hellfire Club* is, you're going to reach a much broader audience; and many people who wouldn't have looked at the book if it had a peeled eyeball on the cover will now pick it up. I'm pleased that in the States Ramsey Campbell's last couple of books were printed without the word 'Horror' on the cover. As I said in the introduction to *Cutting Edge*, the genre offers a safe harbour for people who could not find acceptance elsewhere, but it also limits the number of readers you can have. I see no advantage for a writer of talent and skill to be published exclusively within the confines of a genre."

Dennis Etchison returns to science-fiction themes on occasion: in "The Dead Line," for example, and its notion of organ transplants, which has an opening line that Ramsey Campbell referred to as the most chilling line in horror fiction... "That came from an article in *Harper's Magazine* in 1974 by Dr Willard Gaylin, who speculated that in a few years there might be organ farms and bio-emporiums, where people would go to buy replacement body parts. And that human beings might be kept alive in a vegetative state to provide material for transplants. It was such a powerful article, I acknowledged it in a footnote. I particularly wanted to say thank you for the use of the word 'bio-emporium', which I couldn't improve upon. It was such a powerful and disturbing notion that I thought about if for about eight years before I was able to face writing

the story. It was so unpleasant to write about. It was dramatized on the stage in L.A. three or four years ago..." (Etchison did not adapt the piece himself.) "...I invited a number of friends to come and see it, including Ray Bradbury. It was an evening of short plays and that story was the first. They also did Kim Newman's 'The Man Who Collected Barker,' Sturgeon's 'The Graveyard Reader' and a couple of other stories – a wonderful evening. But my friend Bradbury left after 'The Dead Line.' He said the script was fine, the acting was fine, but he had an aunt who was dying and he just couldn't take it. But it seemed important for me to confront it without blinking – and see where we're headed. That, after all, is the nature of science fiction: the cautionary look at the future. If this goes on, then this is where we might end up. For good or for bad."

Part of Etchison's reputation is for being able to sustain a novel with the energy of a short story. "I go at it as hard as I possibly can. I usually begin by reading the novel from line one again, every morning. Bradbury says not to do that. He always begins writing each morning without looking at what he did the day before. I have to go back and build up the momentum. It also gives me a consistency of tone so the whole thing has the same feeling. It has a skin around it... If you try to write a novel with the same intensity of language that a short story employs, it's exhausting for the reader. So there have to be passages where things relax a bit. Generally, these novels of mine are written with a great concentrated attention to language. And that comes from my training as a short-story writer. Many novels I pick up are written in an offhand style that seems to be no style at all. They're accessible, they're easy to get into – but that's not the way I write... I revise as I go along. If I go for three or four days and get practically nothing done and feel that I've hit a brick wall, I've learnt now that's my unconscious telling me I've taken a wrong turn. I may have to go back and throw out several pages. I have a notebook of discarded fragments and may one day write a brand-new story based on work that I've thrown out."

Who are his current inspirations?

"I'm inspired by a British scientist and writer named Sheldrake, who wrote *The Presence of the Past*. He puts forward a theory of morphic resonance, which is essentially the idea that nature has memory. That is what is missing from Darwin's explanation of evolution. If Sheldrake is correct, his books will prove to be the most important non-fiction books of the 20th century. He has redone Darwin. But the most interesting mind in the world that I'm aware of is the American Terence McKenna, who writes about ethnobotany, shamanology, philosophy, and is an all-round eclectic head. His focus of interest stems (if you like) from the psilocybin mushroom. Incidentally, there was an interview I did here when *Shadowman* was being released in the Raven edition, in which I said that after *Shadowman* was published I went back and reread it and was struck to find there was a recurring motif in the book that I had not been aware of, and it was mushroom imagery. It seemed to me later that the book had been about psilocybin mushrooms, although I wasn't aware of that at the time. When that interview came out in a magazine here the phrase 'psilocybin mushrooms' was written as 'suicide by mushrooms'!

"Watson and Crick, who discovered the twin helix of DNA, suggested there might be life-forms on this earth that drifted here from elsewhere, and that the likely candidate would be fungi spores since they can live in a vacuum. The experience of ingesting these mushrooms seems to be that of encountering an entirely alien intelligence. Something that has its own geometry and vocabulary. We may be entering a consciousness that is not of this earth when we ingest them... Now, will you be writing 'California Writer Has Delusions of Communicating with Aliens?'"

I remark that Whitley Strieber did the same thing in *Communion* and ended up making money, so perhaps it wouldn't be such a bad idea.

Etchison replied, "I know Whitley and I think he's telling the truth as he knows it. The book *Communion* – whether you believe it's a fantasy or something that truly happened, a human being's encounter with aliens – has a peculiar gripping power to it. And he's talking about an archetypal experience. It goes back to the Old Hag story in Finnish mythology, perhaps thousands of years. The experience of waking up in the middle of the night in the dark in your bedroom and having a conviction that there's someone else there – someone who doesn't belong. If Whitley's book was a hoax, why would he have done that? He was making large amounts of money writing horror novels and when he began his *Communion* phase, he was criticized resoundingly and the price of his novels went down in the marketplace... I once stood on a street corner in New York and asked Whitley, 'If I had been standing next to you in the cabin when those things happened to you, would I have seen what you saw?' He did not give me a glib answer; he thought about it for about 60 seconds and then said, 'I don't know.' Not: 'Of course, Dennis...' Whitley claims that he has never been high, and he doesn't drink. He took and passed lie-detector tests... McKenna's view is that Whitley was so thrown by the event *because* he has never been loaded. Terence says he's seen the little green men hundreds of time, and every time they come into his room he has a conversation with them. But Whitley certainly doesn't look at it humorously. Phil Dick once said that there's no way to know in any ultimate sense if a hallucination is true or not. Your brainwaves are being stimulated, just as if you are looking at something. There's no external, objective way of establishing the matter. All you can say is that other people did not see the same things you did..."

The conversation turns to California. Etchison writes about California, where he lives, but he believes that he would have ended up writing regardless of where he lived.

"Every writer reflects his own life experiences; mine just happen to be there. The only differences would be in the specifics. I look out of the window and write about what I see. And I try to find some core of meaning in it that will apply beyond California. I've been gratified to find that British readers have nominated my stories several times over the years for the British Fantasy Award. To them, the Californian landscape that I'm describing must seem very alien. In fact, the stories that won were realistic stories – not fantasies. I wondered if the British readers thought I had a terrific imagination for creating this colourful world. Little did they know I was only describing things as they are, particularly in Mexico which is just below the border with California. To drive down over the border – suddenly you're in another country, a very colourful and bizarre country. Maybe the readers thought I was making it all up!"

What is it about California that he finds so fascinating?

"I'm in sync with its rhythms, and if there are magnetic fields around certain places in the world then I'm part of that, or the biosphere that surrounds the area. To me, it's the centre of the universe and the mark of normalcy – which will get laughs from readers elsewhere. Have you seen *The Last Temptation of Christ*? Here you have these Biblical figures, Judas and Jesus and the others, talking with distinctly New York accents. Judas is saying, 'Hey! Jesus! What the hell *is* all this? Wha' ya doin'?' I love the film, but that was jarring to me. But to Scorsese's ear I'm sure it sounded normal – he's a New Yorker from Little Italy in Manhattan. I'm sure he was unaware of how stylized it sounded to the rest of us. To my ears, I don't have any accent at all..."

Etchison has been asked several times to write something set in England, but it has never quite panned out. "I've been afraid to do it, because even though this is my eleventh trip, I don't really feel qualified to speak much about London except for tiny pockets of it that I know pretty well. The locals would read my descriptions and laugh because I'm so uninformed. If you were to go to L.A. for a couple of days and then fly out and try to write the definitive L.A. novel, readers who know L.A. would find it ludicrous. You don't understand the connections; the whys and wherefores of it. So I wouldn't presume to do it. There was a

round-robin story in *Time Out* magazine where I had to write a piece picking up a route on a map, covering certain predetermined areas of London. And I wrote my piece to coincide with those streets. Then, when they published it, the editors decided to change the locations so that what I was writing didn't fit in with the rest of the geography of the other pieces, and it didn't make sense. That was the only foray I made into writing about London. I'd love to be able to write an intense novel about an American in London but I don't feel that I know it well enough."

In several of Etchison's books – in *Darkside* more than most – the religious cult is regarded as a dangerous force. Most people would agree with his verdict, but what draws him back to the subject of cults?

"Well, you see a lot of it because of this millennial fever that we're going through. There are fundamentalist religious organizations that believe the battle of Armageddon is imminent. According to McKenna's findings, the year 2012 will be the end of history as we know it. He doesn't necessarily see it as apocalyptic, but rather as moving on to another stage. So I'm determined to stay alive until that date to see what happens. The cult business? Every kook sets up his own religion or therapy group in California! That's not unusual. It's just that I see so much of it. In *Darkside*, and to an extent in *California Gothic*, I was concerned with what had happened to my generation. I have the feeling there are millions of people my age who were bright, college-educated, full of promise – now no longer visible on the landscape. Many of them are driving taxi-cabs and washing dishes and are completely out of sight. It's as if the skills they were prepared for with the idealism of the '60s were unable to be absorbed by our society. In those books I postulated that some of them had dropped out and created a cult of their own around psychedelic mushrooms. It's also a matter of homelessness. You see so many homeless in L.A. because the weather is so good. They can sleep on the beach in the wintertime; they don't have to worry about freezing to death. It's as far west as you can go in the old pioneer spirit of finding your destiny. One wonders what bright and promising people are among the homeless in L.A."

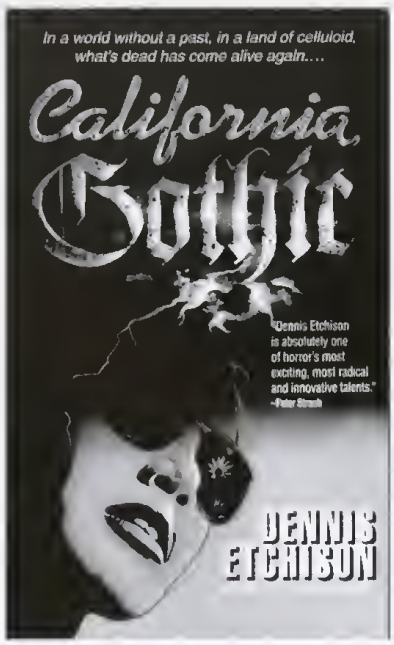
What is Etchison's average working day?

"I get up early and start to work. I write for several hours – before life intervenes. You have to go out to the market or the post office; take care of business. In terms of the length it takes to write a book, I did the movie novelizations in around six weeks each. *Double Edge*, which is published here by Pumpkin Books, was written in seven weeks. On the other hand, I've spent a year and a half or two years on books. Sometimes you set it aside and work on other things for a while... Barry Malzberg wrote some books in 72 hours. I'm a very fast one-finger typist. In the last couple of years I've been working on the computer, which has many advantages and disadvantages. It solves the mechanical difficulties of having to retype manuscripts: it's hugely labour-saving in that regard, but it affects the quality of the prose and mitigates against extensive revisions because what you write comes out looking so perfect on the page – or the screen – as it is. Peter Straub disagrees with me. He claims that the computer causes him to revise much more than he ever did before. I always revised hugely. If you look at the file folders for some of my short stories, they're a couple hundred pages long, full of typed drafts. I would mark up each draft every time I went through it so that there were so many marks on the page I couldn't read it any more. Then I had to retype the page – to clarify it. The stories would go through at least four to six separate drafts on the typewriter. There's no way to measure how many times a short story or novel is revised now that I work on the computer, but they're revised constantly and fanatically. Combing it with a ever-finer-toothed comb until it looks perfect. To my eye."

We talk about his struggle for literary attention before the field opened its arms. Did he ever feel that it might be better to give it all up?

"I'm still thinking about it! I was a Theatre Arts major. Half the time English and half the time Theatre Arts. And when you work in front of an audience you can hear and feel the response immediately. You know when something is going over; you can adjust it for the next performance. But when you're writing, it's not even going to be published until months, or years, hence. And then what sort of reaction are you going to get? A few letters will filter through. And unless you actually go to conventions or book-signings and meet the few people who read your books, you're not going to know how they're received. You have to distance yourself from the critics. If you believe either the good or the bad reviews you're in trouble. It's easy to dismiss ignorant reviews by people who didn't understand what you were doing. I don't mind if they disliked what I was doing, but I would like to feel they understood what I was trying to accomplish. But half the time you get reviews from people who don't have a clue what you were writing about. So you disregard them. You say, *What an asshole.* But if you do that, you have to be willing to disregard the favourable reviews. And it's hard for your ego to do that because anybody who praises your work, you think, Wow, they must really understand. But they may not have understood either...

"I know a short story or a book that I've written much better than anybody else in the world. I've read it a hundred times. And just because it's published doesn't mean I think it's perfect. You don't write in a vacuum. You write on a schedule, professionally, and something may be published that I know is flawed. I understand the weaknesses of the work better than anybody else. I could give you an annotated version of one of my stories that would point out not only the references and the origins of the lines and thoughts, but what I was trying to do – what I wished there were more of, what I now think there's too much of. After you've written it and set it aside, you can come back to it and you see it in a different light. So I now look back at any story of mine more than a couple of years old and it does not look good to me. I could go through it and make it better, but I don't do that. It represents the best I could do *at that time*, under those circumstances, and it's representative of the person I was. I am embarrassed by some of the early stories, which continue to come back in reprint anthologies around the world. It's nice to be paid for work I did in my teens! But I can look at it as if someone else had written them and say, 'My God! Is he aware of how these words look on the page?' I have a more acute sense of style than I did then; a better understanding of myself and human relationships. Two years from now I'll look back at the present stories and be appalled. But it's like life: what you do is the best you can do on that day. You have to finish your job at the end of the day and say, given the circumstances, this was the best that I could do. But tomorrow's a new day. I can try to do better."



Over the years he has won quite a few literary awards, but he is subdued on the subject of their worth.

"Awards are a wonderful reassurance, but you cannot take them too seriously. If you look back at the history of awards in this field, you will see quite a few writers and works which, in retrospect, you feel didn't really deserve the attention." He is understandably reluctant to name names at this point... "How could I look those people in the eye again? But how can you be sure that you as an artist are entitled to an award? All it means is, some people liked it, and you thank those people."

I ask him if he believes his work has changed since he got married.

"I used to be accused of being misogynistic in my fiction. I never saw it that way, but a number of people read my stories and thought I had a problem with women. I wasn't conscious of that. I'm more conscious now of trying *not* to sound misogynistic in my fiction, because I have a wife who's going to read them. To describe an unpleasant human being who happens to be female and to describe her type realistically is, I think, not misogynistic. It's simply realistic writing. I describe a number of unpleasant human males in my stories but I'm not anti-male. I don't think I have any more bad women than bad men in my stories. People who have a hyper-sensitivity for that subject point out my so-called bitterness towards women. I have the highest regard for women. They are superior to men: physically, mentally and emotionally. If I looked down on women, why would I want one to live in my house with me? You can't generalize or universalize about a gender, or any group. My wife is a distinct individual and she does not represent all women – and I certainly don't represent all men. I've tried to avoid writing about her in particular; I don't feel comfortable doing that. But other women I've known have appeared in my fiction in various guises. Not to get even with them, simply because since I have known them I have insight into the way they thought."

Earlier on in his career, Etchison wrote several novelizations, and I wondered how these came about.

"I did *The Fog* was because I was a fan of John Carpenter. When it was offered to me by Bantam Books, I really couldn't resist the opportunity to meet with him. I liked him immediately. I handed him a copy of a story of mine that had just been published called 'White Moon Rising.' His eyes got large and he said, 'I've just written a script called *Black Moon Rising*.' So we immediately hit it off. It was a good experience. He and his producer came back to me for *Halloween II* and *Halloween III*, which I wasn't as keen on since John wasn't directing, but at the time we were talking about my writing a script for *Halloween IV*, which I ended up doing – not the script that was filmed. John sold his interest in the title 'Halloween' to his partners, and they ended up using other screenwriters... Then, when the opportunity came to work with David Cronenberg, I couldn't turn that down either: the novelization of *Videodrome*. I had the highest regard for Cronenberg. I was able to go to Toronto to meet with him, to read different drafts of the script, watch the film at various stages of editing. It was fascinating – too much so to turn down. I'm a huge movie fan."

His latest novel, *Double Edge*, would make a good film, and indeed was inspired by one, at least in part. *Double Edge* explores the infamous Lizzie Borden case. (Andrew and Abby Borden were murdered with an axe near the end of the 19th century; although there is evidence to suggest that their youngest daughter, Lizzie, perpetrated the crime, it remains unsolved because there is other evidence to suggest that she could not have conducted these murders.)

"I had always been fascinated with that case. There was an American television film for ABC called *The Legend of Lizzie Borden*, starring Elizabeth Montgomery. It was written by William Bast and I had been familiar with the case before that, but the film (directed by Paul Wendkos) was so exceptional that I began to read whatever I could find. A few years ago, Robert Bloch, who was a good friend, loaned me a couple of books. I found that every author had a different solution to the murders. And all the theories were convincingly argued. I set out to write a new novel, and since it was something I already knew so much about, I didn't have to do any additional research. I decided to put forward a theory that, to my knowledge, no other author on the subject has suggested: that there were... Well, if I say it, that will give away the book! It's fascinating because it's an unsolvable case. I could make a convincing argument for any of several characters being the killer. You can now stay in that house as a Bed-and-Breakfast, by the way. They've restored the original wallpaper, the original furniture. I would love to go there and spend time in that house. I have a feeling I would get a sense there of what might have happened. I'm a very visually oriented person, and the idea of standing there seeing the yard – I think I would have a clearer idea of what happened." And then he could claim the trip as a business expense... "Well, absolutely! I know that the last questions I had about the JFK case, which I investigated for 13 years, remained unanswered until I actually went to Dallas, and then I saw the last piece of the puzzle. Because of the way the buildings were laid out, it was very clear to me."

What purposes does he think horror and fantasy serve?

"It does seem to be the appropriate form for contemporary fiction, since what we're living in seems increasingly irreal. Through *my* eyes, things look stranger every day. So if I describe these things realistically, it's going to look like magic realism. You have to hunt for the universal truth at the core of it that will be meaningful to others. The only thing I can write about is how things seem to me. And whether or not others will find it interesting is out of my control. Steve King, for example, happens to have a view that a lot of people can identify with. He has something in common with a large number of people so they understand exactly where he's coming from. But I don't think he set out calculatedly to write in a certain way. If I set out with a point of view calculated to appeal, you would detect the falseness. The reader can tell when you're not being honest."

In an attempt to reach the central truth of a story, Etchison has abandoned several tales because they have proved to be too difficult to finish. "Sometimes you put them aside for a while; more often what happens is that you end up exploding it outward from the centre. You turn it into something different. I could show you stories where originally they were going to go in an entirely different direction. When I was writing *Shadowman* I had it planned all along that the murderer was someone different. But when I got to that point, I realized there was a better, more interesting way to tell the story. Writing is all about trying to find the heart of the story and articulate it, and it may or may not be what I had originally planned. But you have to be open and conscious enough to see what it really is. If you hold it too close to your pre-planned notion, it may not end up reading true. That's the problem with writing for Hollywood. You have to do outlines which are discussed and torn apart endlessly by others. But when you get into the writing you may discover much more interesting scenes and directions, but you don't know that when you start. It's like trying to plan a date in advance. 'As I help her on with the coat, that's when I'll try to kiss her...' But it doesn't ever quite work out that way. You have to live the moment and respond to it honestly. That's very much what writing is."

Dennis Etchison and I took a bus from the house in which he was staying to the train station. He thought I was terribly generous to pay his 50 pence fare, which I assured him was on *Interzone*. He was off to the West End to meet his wife and some friends, and I was travelling home to Bedfordshire. I found Dennis to be a warm and giving individual, with no prissiness or falseness; more a feeling of gratitude to be working in a job he enjoys and a general contentment with the world. His work is bleak and raw, but his temperament on the day of our meeting was sunny, cheerful, and above all, truthful. IZ

Unravelling the Thread

Jean-Claude Dunyach

Proof of *their* visitation can be found in the antique carpet section in the basement of the Museum of Civilization. There are two of us who know about it: Laura Morelli and me.

The basement is our turf. The most valuable carpets are here, stored in almost total darkness to keep their colours from fading. The public isn't allowed in here and there are so few specialists working in the field that we often find ourselves alone for weeks on end.

Laura chose me for her assistant after a surprisingly brief interview. I was under the sway of her charm from that first contact. She has an exceptional voice, rich in nuance and timbre, as gorgeously woven as the carpets she handles; carpets whose stories and secrets she is teaching me, in my turn, to unravel. I believe that she wants to pass her heritage on to someone. Time is catching up with her; soon enough she'll be forced to retire and leave her work behind. It's not so much losing her job that terrifies her, but losing access to the most beautiful pieces in the collection.

Everything here is organized to suit Laura: the labyrinth of racks where the most beautiful samples hang, open to her sensual, almost reverent caresses; the stand where every hook and every needle is arranged in precise order. This is her domain, but she started sharing it with me, little by little, when she realized that I loved the carpets for the same reasons she did.

Every wool carpet from Upper Kurdistan holds a slice of life in its tightly knotted weft. These carpets are so large and so complex that a weaver only completes one, two or – very rarely – three in a lifetime. Collectors look at them and marvel at the complexity of their patterns and the beauty of their shades. We examine them from the rear, where their tight stitches press against one another like the grains of sand in an hourglass. Laura guides my clumsy hands along the knots, showing me where, one day, we'll have to replace a worn strand with a new one.

Our relationship, while friendly, remained formal until last autumn. I used "vous" in addressing her, although she casually used "tu." Our fingertips frequently touched as we restored the carpets and I had learned to read the discreet murmur of her breath in the subterranean quiet. My hearing was better than hers; for her benefit, I'd make a lot of noise as I moved about – which prompted her to tease me about my clumsiness.

Then, one morning in October, I heard the mouse.

Rodents are our mortal enemies. They run silently to the easels and attack all the threads they can reach. They cause so much damage that we wage a ferocious war against them. Laura, who fears them like the plague, fills saucers with poison and places them under the pipes. I'm the one who disposes of the corpses when the odour draws our attention to them.

The mouse that I heard was very much alive. Its paws clicked on the concrete as it dashed along, and then it paused under a piece of furniture. Laura was at the other end of the room, examining a new wall-hanging from a Spanish convent. The little beast was heading straight for her.

I could have driven it away by making a racket, but it would only have come back again during the night. I picked the scissors up from the work table. My ears were pricked, ready for the slightest sound. I slid silently into the empty space between the piles of boxes and plunged towards the racing feet like a clumsy cat.

My cry of pain, as I caught my temple on the side of a trunk, made Laura jump.

Waves of pain pulsed through my skull. I might have lost consciousness for a second or two – but then I felt something wriggling against my midriff. The mouse was alive, trapped beneath my body.

I killed it with the scissors, ignoring Laura's anxious questions. Then I pulled myself to my feet, holding the lifeless little body by the tail. A drop of blood flowed down my cheek.

"A mouse," I said, shivering. "I got it."

She froze.

"Throw it out quickly! The smell might attract others!"

"I'll tell the caretaker to clean up." My head spinning,

I sat down heavily on a crate. "I need a glass of water."

"Were you afraid?"

Then she felt the sticky blood on my face and quickly moved into action. She picked up a clean rag from the work bench and delicately wiped my temples. The blood clotted very quickly. Jokingly, she told me that she was prepared to give me stitches. She also said that I was an idiot, and then thanked me. The dead mouse lay on the palm of my hand as she kissed my cheek.

On several occasions during the next few days I got the feeling that Laura was trying to come to grips with some sort of decision concerning me. When you work with someone, you quickly become sensitive to this type of scrutiny. I didn't think much about it. I waited. If nothing else, the carpets teach patience.

One morning, she made up her mind. We were taking tea together – a light, perfumed Darjeeling which the departmental secretary prepared for us. Normally, we would have exchanged the latest scraps of gossip from the world outside, or talked about the cold weather that was gradually settling in. This time, I barely had the time to take a few sips of tea before she pushed her cup away.

"I've considered it, and I want to make you the gift of a story. But you'll have to read it for yourself. I'll help you... after all, I suppose that someone will have to take my place one day, and I'd just as soon it were you. You'll take good care of things."

I agreed. We both knew that it was true. She took my arm and led me to her office, a narrow room – all length and no breadth – where we stored documents we no longer needed. On the wall at the end, an unfinished carpet hung on an iron frame. Laura had never allowed me to examine it before. There was an open space between the wall and the frame just large enough for Laura to slide in. I had a little more trouble and made an ironic comment about my excessive girth, but Laura remained silent for a long while.

"Stories always ought to begin at the beginning," she murmured, pensively. "Unfortunately, too much is missing from this one. I came across this carpet in a trunk at the warehouse, a short while after coming to the museum. My predecessor was not very gifted as an archivist. He preferred climbing mountains in Kurdistan in search of rare samples to updating his catalogue. All that we know about this carpet is what it can teach us itself. Get started on it."

I placed my hands on the edge of the woof, palms extended for the moment of first contact. As I imposed myself upon it, the threads began to sing in the hollow of my palm, speaking to me.

"Eighth century," I said. "Alternating double stitches. The grease was removed from the wool with urine, and then the wool was boiled with plant extracts. Kurdish, I'd say. One of the mountain villages which sold their produce to the caravans. Am I right?"

"I came to the same conclusion. I've sent some threads over to the lab on several occasions, to get a little more information. The vegetable dyes are typical of Kurdistan. No more details. Frustrating, isn't it? This carpet was created in one of those villages now being destroyed by Iraqi bombs – unless, of course, it was already destroyed centuries ago, by Turkish conquerors!"

She made a visible effort to calm herself, and went on: "You're a good student. That's fine. Now, I'm going to ask you to be a little more creative. Someone wove this carpet. Try to tell me who that person might have been."

"It's a she..." Laura's hand gently caressed my arm. "I don't know why I say that, actually. Perhaps the way she tightens the threads, more respectfully, more economically. I believe a little girl began this carpet."

"And a woman finished it. You're right. I've taught you that much, at least. It's strange, the way that what you leave behind is nothing but a thread in the life of your successors."

"If you're lucky," I said – and I believed it.

"I'll guide you."

Her tiny hand, astonishingly firm, settled upon my huge paw and directed it towards the edge of the carpet, where a row of loose threads was dangling.

"This is where it all begins: the first knots in the weft. A child, puberty still before her, with fingers small enough to knot the pony hairs used to anchor the pattern. In the beginning, she didn't tie the hairs tightly enough, and there are irregularities. Can you feel it?"

I followed her account with the tip of my thumb, as if I were reading a book. The irregularities were barely noticeable and I wondered how long it had taken for the tale to emerge from the obscurity.

"The she improves with practice, row by row. Let's jump two or three years ahead. There, just below my index finger – what do you make of that?"

"She is becoming unsteady again, but it doesn't last."

"You aren't a girl. The first menstrual periods are upsetting, but you get used to it. You have to. So, our little weaver is beginning to grow into a woman. Do you sense how the knots have become firmer over the years? Winter, summer... nothing more than ripples on the surface of the pattern. Up to this point, there's nothing to set her apart from her sisters, who are doing the same work in her village. But here" – she guided my hand with assurance – "here we have our first mystery."

Between the regular knots were others, placed along the weft in groups of five, woven into the primary structure as if someone wanted to hide them. I rubbed the place with my palm, perplexed.

"Never seen that before. It's too regular to be a mistake and it doesn't serve any purpose, structurally speaking."

"Use your imagination... "

"A religious pattern, maybe, a secret sect thing, like some sort of rosary? The villages of that period saw the passage of preachers of every kind. Or perhaps... I'm stupid, aren't I, Laura! She's still just a kid. She's not rebelling or plotting against anybody. She's writing her name in the only code she knows."

"Her name, or that of a lover. Hard to know at this point. But look here. All of a sudden, the weaving is interrupted for the first time. Someone's knotted the ends so that the pattern doesn't unravel and the threads of the weft are flattened. What could possibly happen in the life of pubescent girl to keep her from work? Marriage. Our little one has become a woman in every sense of the word – who returns to her place at the loom several months later.

"What was she like? A young woman with enough strength of character to leave a little trace of herself, knowingly, in this rug. I wonder if what she'd done had

been discovered, and she was hastily married off before she could become a little too independent."

"But that wouldn't hold up, if the name she wove into this carpet were her lover's!"

"I'm the one telling this story..." She pulled me a little further along the folds of the cloth and I felt the centuries close in upon us. With my back against the wall and my hands stretched out in front of me, I caressed the slow extension of a life whose multicoloured hours were composed upon the underside of a work of art.

"Hold on to my fingers and we'll search together. It was an eighth-century marriage, in a mountain village – we ought to find a string of babies. Here's the first... a series of brief interruptions. The stooped position of the weaver is difficult at the end of a pregnancy. Then a pause" – the sealed-off threads were there again – "and then the work continues."

I felt her fingers stiffen. In my heightened state of awareness, something clicked into place. I moved back, her hand docilely following mine. The pregnancy, the supposed birth. A little early, maybe, but how could we know? Then the weaving starting again...

The knots. The knots were slack, lifeless.

"She lost her baby," I said. "It's no longer there." I couldn't say how I had fathomed it.

Laura's breath was muted by the fabric which surrounded the small space in which we were enclosed. The floor vibrated under our feet as the museum's heating system started up, with increasing frequency because of the approach of winter.

"She didn't have any more babies during the ten years which followed... look at the next portion of the fabric if you don't believe me. Something must have gone wrong within the beautiful human mechanism, unless her husband left her. Her fingers have regained their rhythm, but the joyous tension that drove them isn't there any more. The experts I've shown the carpet to say it lacks life. That's why I'm allowed to keep it here, supposedly for the part it plays in comparative studies. It's virtually worthless.

"So, here we have our weaver, about twenty-five years old, in an era when those women who managed to survive were grandmothers at thirty. She's sterile, probably alone. In all likelihood, she lives some way outside her village, in keeping with the tradition of the time. She weaves because there's nothing else to do, and her knots have a mechanical regularity. What has become of the rebellious child who wrote her name in the threads?"

Laura's hands fluttered and the air they stirred brushed my face like caresses woven by spiders. I returned to my reading of the weft, through interminable years without a single rough patch... until I felt them again: *the same knots as before*... A signature, the reawakening of a voice that had sunk beneath the weight of sadness.

They sprang up irregularly, for no apparent reason. Separated by whole weeks to begin with, they ended up being repeated each day. The five interlacing threads were perfectly recognizable, and my fingers read them like the characters of an unknown alphabet.

"If we knew what they called these knots, we'd know her name," I said, shaking my fingers to relieve the cramps. "Everything had a name, in that period, but that information is lost."

"I've thought about it often enough! But I suppose the past ought to be shrouded in mystery, or we wouldn't be interested in it any more. Anyhow, we're coming to the end of the carpet and this is where things become truly strange. Read on... "

I drew my fingers over the woollen page: once, then again, more slowly. Somewhere, between two strands so tight that it would have been almost impossible to slide a needle between them, the narrative changed direction, escaping me. I shook my head in frustration.

"I don't understand... "

"I'm asking too much. I've studied this carpet all my life and things have become clear to me so gradually that I haven't the heart to force you to follow the same road as myself. But it's necessary that you make the effort to believe me, because I'm too old to put my whole life back in doubt. Read with me...

"There's her name, repeated like an incantation, often woven with her own hair. That lasts up to the point where one could almost believe that she'll smother under the weight of her own frustration. There are knots tied off more and more frequently: pauses in her life. I suppose that she's going further away from her village, as far as possible – that she's going deep into the mountains, as women have always done when they've wanted to be alone. She's almost forty, possessed now of that bitter kind of freedom that comes with old age. Nobody asks her for anything...

"And there... feel it!"

The narrow strip of wool bears no resemblance to any other part of the rug. The signature knots have vanished. The threads are stretched with a kind of haste, even though they're impeccably aligned. They seem to give off an impression of energy, *of joy*.

"If she were living in our era, I'd say that she found a lover," Laura murmured. "But we're in Kurdistan, more than a thousand years ago, and no man of her own day would have given her a second glance. A sterile grandmother, a body doubtless deformed by the endless years of non-stop weaving, eyes almost dead. But she found *someone*... The real mystery is here."

"Yes," I said, because my spirit was now in tune with hers, and I was afraid of the consequences of what I had discovered. "But the rug is broken off shortly afterwards. So?"

Laura's fingers guided mine yet again to the other side of the weft. And it was there that the story came together...

Among our weaver's threads were others, intertwined with them: an extraordinarily tight weave that traced motifs in relief along the length of the rug. Other knots were interlaced above these motifs in which new branches thrust out and then branched again, within the interlacings of the original. The geometry of the narration was completely different here, the characters designing a galaxy whose silken constellations were quite unknown to me.

I know my own kind, and I know weaving. The knots and the threads that were employed here were not of human origin. We don't have that many fingers, or a sense of space sufficiently finely-tuned to create such a design. The hairs were finer than horsehair, and my thumbs could barely read them. I felt that each layer hid yet another, that strange words formed new inter-

connections, in covering others that were hidden deeper beneath the surface. In order to read the ultimate pattern, we would have had to destroy the carpet: a sacrilege I would never have dreamed of committing.

All around, the weaver had let her happiness explode in multiple variations, beginning with the knots that were her name. In caressing the weft, I imagined two individuals bent over the same loom, their hands and their hair intertwining. I would have liked to stroke their crooked silhouettes, in order to know them better.

"What would it have looked like?" I wondered aloud. "Terrifying by virtue of being different – and yet she allowed it to touch her carpet, and her life."

Laura sighed.

"We ought to be capable of understanding. Appearance didn't mean anything to her any more. The only thing that mattered to her was the kindness of its fingers. Years of working with minute precision in poor light had ruined her eyes. She was blind, like us."

I had to make up my own ending for the story. The weft broke off abruptly with an unfinished row, concluded in haste. I read terrible things into that absence. Cries, thrown rocks, one murder or two... I don't know how the rug had come into our hands. Perhaps it emerged from a grave into which bones had been cast without regard to their form. Anything is possible, so the truth is inaccessible.

But Laura's words still ring in my memory: "Intelligent beings rarely travel alone. This was no isolated explorer. I refuse to believe that no other contact was made.

"One day, perhaps, a carpet will appear that will tell a story similar to the one we have read. Together, we shall unravel the language of the threads, and then we shall teach it to all those fortunate enough to be like us. We shall teach them to read the weft, so that they may pass the knowledge on to their descendants.

"If we succeed, the next meeting won't be stopped short by appearances."

Translated by Ann Cale and Sheryl Curtis, with assistance from Brian Stableford.

Note: This story was first published in *Galaxies* 4 (Avril 1997) as "Déchiffrer la trame." The French title contains an untranslatable pun: "trame" means both "weft" and "plot"; "déchiffrer" means, of course, "to decipher" – BS.

Jean-Claude Dunyach, who has been writing for some years, won the 1998 Prix Rosny aîné (France's annual fan-voted sf award, as opposed to the jury-awarded Prix Apollo) for the above story – "the best of 1997." It is the first story translated from the French that we have ever published in *Interzone* – shame on us – just as Michael Iwoleit's "Takeover," elsewhere in this issue, is the first we've ever had translated from the German. Thanks to Brian Stableford for bringing our attention to the Dunyach tale, and to Carter Scholz for providing the Iwoleit piece (Scholz's first-ever translation, he tells us, as well as his first appearance in *IZ*).

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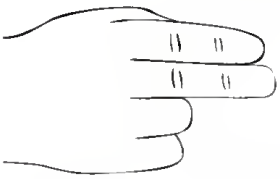
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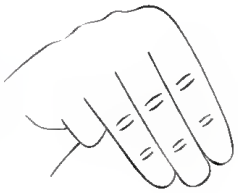
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THUMBS













Judi Moore

"Thumbs," the woman in the white coat said earnestly. "Without opposing thumbs it is impossible to develop any kind of mechanical technology, or to go beyond that. Tool use depends on thumbs. You pull the trigger of a gun with your forefinger, but without a thumb you can't hold the gun steady enough to hit anything. All manual dexterity depends on the thumb."

"So your interest in the creature is just in its thumbs?" He sounded incredulous. "Not how it got here, or why – just its thumbs?"

"It all flows from that. We have thumbs, it has thumbs. What it has done we must be able to do – don't you find that marvellously exciting?"

She obviously did. A slight flush came into her cheeks. Her lips remained apart and she moistened them. He noticed a faint glitter of perspiration appear above her top lip and on her forehead. He found her excitement arousing. He wondered what she would look like without the shapeless white coat. Then he went further. He had got down to underwear when he remembered why they were there. It wasn't every day you caught an alien sneaking around on Earth. It was a big event. He couldn't help thinking, however, that getting his companion peeled and into bed would be a pretty big event in itself. Maybe bigger than this alien thing. After all, science fiction and speculation had pretty well run the gamut of alien possibilities. He was prepared to bet that the reality of this actual alien would be small beer compared to the literature they had made up for themselves about such things on Earth over the centuries.

They walked down the ramp into the bunker. He noticed that she was breathing heavily. Somewhere under the white coat two shapely breasts were rising and falling. He'd like to feel those two nipples under his thumbs...

"Nervous?" he asked her.

She gave a breathless little laugh. "Just a little. This is, after all, the zenith of all my work on tool use to date."

Couldn't she express anything in simple, human terms? A logic driven egg-head with nice tits. He gave a mental shrug. They'd be working together for some time. She couldn't leave the base now until the project was complete. He'd see what a few drinks in the bar would do for her egg-head and her tight arse. He'd make it a private sub-project. It didn't matter how bright the woman or how big an opinion she had of herself, they all turned into mewling kittens in bed. She might not get far with her alien – but he was going all the way with her.



The creature awaited them in a small medical facility on the lowest level. It was propped up on a high, narrow gurney with barred sides. The room was warm, there was no coverlet – to permit maximum observation she presumed. Everything seemed to have been set up very well. Various monitoring devices were attached to the creature's body. It was a pale greyish, spindly thing, vaguely humanoid. It appeared to wear no clothes, it had no noticeable genitalia. It had a large head and orifices that might be analogues of nose, eyes and mouth. Its most noticeable features – and the rea-

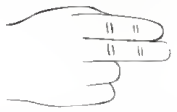
son that she had been sent for – were its two hands. She found it impossible to believe that they could be anything else. The creature was the size of, perhaps, a malnourished ten year old child. Its hands would be considered large for an adult. There were three digits and large, well-developed thumbs. The digits were long and looked strong, in contrast to the rest of the creature, with deeper grey veining to be seen on the backs – tendons, bones or blood vessels, she couldn't tell. The two hands lay now loosely clasped across the creature's torso. They looked useful. The possibilities for her research – for the whole human race – were outstanding.

It was difficult to know what level to start on. They knew it must have arrived on Earth in some kind of ship from beyond their own star system. Since Earth had no such capability they had to assume that this spindly race was more advanced than they were. However, the temptation with a creature that doesn't understand you it to treat it as inferior, mentally deficient – like a child, or primitive, or dog. The face – if such it was – was expressionless, giving an impression of vacuity. She realized how much humans relied on facial expression to communicate now that she was faced with something that completely lacked these clues.

Before they could get into anything detailed there was a primary problem that must be overcome – communication. She was used to dealing with primitive societies where language was not written down and had evolved a kind of language with her hands, with some basis in signing for the deaf and gestures she had found common in the tribes she had studied. She started with that, making the signs for peace and friendship and spelling out her name. The creature continued to do what it had been doing since they came in. If one was anthropomorphizing one would say that it was staring at them, but one had to make so many assumptions to come to that point that she preferred to rely on the instrument readings from the monitors attached to the alien. By x-raying it – a procedure she had been completely opposed to, who knew what effect radiation might have – they had ascertained where the masses of organs were located. They didn't know what the organs were for, but had slapped monitors on them all, certain that the gathering of enough data would allow some sort of extrapolations to be made. She saw no change in any of the readings as she worked.

It was becoming frustrating, and projecting even simple messages at this intensity was very tiring. After about an hour she made signs for goodbye and they departed. She had never been sure what role the man they had given her to work with was supposed to fill. She scarcely needed protection. She presumed he was some kind of military requirement. It would have been helpful to have a colleague with whom she could exchange ideas but this... She found him boring, surly and lewd. He had contributed nothing to the interview, when she would have welcomed additional ideas. Brainstorming with an expressionless alien and a human male of this kind was impossible. She felt very isolated.

When they had left the bunker he suggested that they go to the bar and discuss progress. She didn't quite manage to swallow a bark of ironic laughter, made her excuses and returned to her miserably uncomfortable billet to consult with her books. She had an uncomfortable feeling that the alien's apparent passivity simply meant that she was missing something that was very obvious to it and should be obvious to her as well.



They returned to the bunker after dinner. As they walked down the slope she thought to ask her companion whether the creature had eaten. He shrugged. Logistics were as foreign to him as logic it seemed. What sort of nourishment did the creature need, she wondered – and was it getting it or was it just starving quietly to death? She picked up her pace down the ramp. Suddenly she felt urgency about this next interview. They must find a way to communicate quickly or it was likely that the object of their study would be short-lived and nothing would be gained.

This time, although she made the same signs as she had done on her first visit for welcome and peace, and spelled her name again, she let her hands lie quietly in her lap after that. She cleared her mind as far as she could and sat with her face as expressionless as she could make it, emulating the alien. The man started to fidget, so she sent him out to check with the doctors whether they had made any progress with making sense of the readings from their monitors – and whether any attempt had been made to feed the alien.

Almost as soon as he had left the room the creature's hands began to move. At first there was a slow, tentative fluttering – then she recognized that it was repeating to her all the gestures she had so far made, including the goodbye gesture which she had made only once on her previous visit. Excited and pleased she clapped her hands and smiled. The alien's hands immediately clapped as well. There was, of course, no accompanying smile. She noticed that the orifice that might have been a mouth was more like a sphincter than a human mouth with lips. She wondered what lay behind it. She didn't think that it was capable of a smile. She wondered how it showed pleasure.

As she wondered the creature lifted its hands up to chest level and put the thumbs together, making a shape like a bird with outspread wings, then it crossed its wrists and made the bird shape towards itself. It repeated these two gestures several times. She smiled again and imitated the shapes herself. It felt good. The gesture was so graceful, so peaceful. She speculated that the creature might be able to take thoughts from her mind, but that perhaps she was not able to receive its own thoughts. A stilted conversation.

Working on this assumption she began to think and sign together, repeating the physical manifestation of each thought twice. She included the query sign often. Before long when she thought a question the creature would respond with the query sign. Communication was established. The creature was very quick – as she had expected. Soon she felt able to ask about food.

Have you eaten? she signed.

No.

Are you hungry?

Yes

What do you eat?

No response.

Please try and tell me what you need.

At first the creature did not reply. She repeated the query sign. The creature made the sign of the bird, almost framing its face with its hands. It might be a fanciful notion, but she felt it was imploring. All she could do in response, however, was sign that she didn't understand. The hands lowered and became still.

She glanced at the big white clock in the facility and was amazed to find that five hours had passed. She was, herself, very hungry. It felt wrong to eat herself and not be able to obtain food for their guest – but she dismissed that idea as folly. It would help nobody if her efficiency were impaired through lack of food. She signed her intention to leave for a while and to return after rest. She suggested that their guest should also rest, signed goodwill and departed.

On the ramp she met her surly companion returning with a big sheaf of readouts from the monitors. She took them from him.



He had spun out his errand as long as he could. The creature, so still, made him uncomfortable. Being so close to her made him uncomfortable too. The more she ignored him the more he wanted her. The more he found his mind wandering onto what he would do with her when she finally thawed for him. He was used to looking out for danger. His reflexes were honed, his mind razor-sharp when it came to threats, tactical advantages, angles of fire, possible ambushes. This assignment gave no opportunity for any of that. The thing was motionless, in a bed with bars around it. It looked feeble, it did nothing. This was a waste of his time.

His mind didn't take kindly to the enforced inactivity, tended to wander off to a warm bed with wine and soft music, to unbutton, unzip, unhook. He couldn't shed what she had said about thumbs. He imagined his thumbs on her body, on her nipples, her earlobes, her neck...

"Any progress?" he asked, because he had been told to.

"Some – a little."

Somehow she didn't want to tell him just how much. She had begun to have feelings for the alien. She had begun to feel protective. Perhaps it was just that she really didn't like this man. She was short with his renewed insistence that they go to the bar – this time he justified it by saying that she looked tired and would feel better if she "unwound." She barely heard him and set off with her print-outs for her own quarters.

He watched her go, found his fists clenched by his sides. Snotty totty – that's what she was – treating him like a glorified tea boy. He couldn't believe she'd turned him down twice. He'd go over and see her later, with a couple of bottles of wine. That should do the trick.

But when he went over later she wasn't there. He tried the canteen and the bar and she wasn't there either. As he had been told to keep a close eye on her he became concerned. Eventually he thought to check with the bunker and, yes, she had returned there after a couple of hours and was now working with the alien once more. Quickly he went down to the lab. Through the glass wall he could see their hands working.

So, he thought sourly, *she's made real progress. She didn't tell me.*

He went in. She looked up to see who it was and he could see the irritation in her face.

"Come in, sit down and keep quiet," she said.

He felt his fists ball again, but he had his orders. He would settle with her later. He sat down in the only other chair. It was close to the alien. He tried to take an interest, but their conversation completely excluded him. He leaned back in his chair and crossed his knees, then he crossed his arms. She glanced over at him and he knew that she read the body language.

"You can leave any time," she said. "I'm fine here."

She returned immediately to her conversation with the creature. His discomfort interested her not at all.

He noticed that she seemed to be asking the same question of the creature time after time. There were variations in the question and sometimes one or the other of them would make a rather appealing gesture with both hands, like a bird. Sometimes the bird's wings would beat outwards, sometimes inwards. He found himself becoming curious about this beautiful gesture despite himself. Finally he asked her:

"What does this bird thing mean, then?"

"I'm not sure – pleasure? Food? It's what I'm trying to find out. It's hungry. It's told me that – but I don't know what it likes to eat. I couldn't go to bed knowing it was hungry."

When he had interrupted the creature's hands had stopped their fluttering and were still again. She tried to resume the conversation with it, but it remained stony. She sighed with exasperation which he felt sure was aimed at him. She tried again, but the creature didn't move. Suddenly she stood up.

"I think it wants us to go now," she said.

On their way up the ramp he tried to interest her in a nightcap, but she barely heard him and when she realized he was still with her when they reached her quarters she dismissed him with barely the civility of a "goodnight." He fumed, but went as bidden. He was beginning to dislike this assignment intensely.



The next day she was, again, missing when he called for her. He guessed this time where she would be. Sure enough when he got to the bunker she was there before him. She had wheeled a little trolley into the lab and placed it between her and the alien. On the trolley was a box with a hinged lid.

She acknowledged his arrival with less irritation today.

"It makes it more difficult, but I will speak what I sign, so you can follow what is happening. I sign to teach our guest – it takes my meaning from my mind but it seems that it can't transmit the same way."

"OK. Thanks. What's the box for?"

"I decided that it was time to get down to the reason why I was brought in to this. If I can't find a way to get nourishment into our friend then we may not have long. Be aware that... it... understands what you think."

She began to sign and translate for him.

Why don't you look in the box?

Why?

Don't you want to know what's in the box?

I know what's in the box.

How do you know?

I can see into the box, as I see into your mind.

She opened the box. There was a flower inside. A fresh rose.

Don't you want to touch the flower?

No, I don't need to touch it.

She bent forward and picked the flower up, she held it to her nose and smelled it.

It smells good. Do you like this flower?

It has no savour.

She had trouble with this last word and they spent some time defining it with busy fingers. She said, at last:

"It seems that taste and smell are almost the same thing for... it."

She returned to the food question.

What can I put in the box that you would like?

Why should I want anything in a box?

We put food in boxes sometimes. We call such food sandwiches – snacks.

I do not understand.

She threw up her hands in frustration, spoke without signing.

"What can I do? It'll die if I can't find out what it eats. And as you see, it has no interest in using its hands. It uses its mind to probe, to communicate. It has no interest in lifting, in tasting or smelling. Those beautiful hands – that beautiful gesture – what does it mean?"

He shrugged.

She bent over and put her face in her hands. "I'm very tired."

She stretched her head up and back, stretching the cramped muscles in the back of her neck, trying to get rid of an incipient headache, running her two hands down her throat.

What fragile entities we are, she thought.

Then she noticed that her guest had changed position for the first time. It leaned forwards, stretching the monitor leads and causing one of the them to pop off its body. She searched in her mind to see if anything were there. She could sometimes sense an emotion from her friend. There was nothing. The bland face had not changed – there was just that one shift of position in the cluttered medical bed.

She made the query sign and concentrated on:

What? What do you want? Tell me.

It made the sign of the outward-facing bird for her – pleasure. She made the sign herself.

But pleasure in what?

I am very hungry.

She felt enormous compassion for her friend. She wanted so much to help. She got up and crossed the room, moving the trolley and the useless box out of the way. She let down the bars on the far side of the gurney, perched on the edge of it, stretched out her hand towards those beautiful hands, still held in the bird sign.



This was dangerous, he felt in instinctively. There was no telling what the alien was capable of – no telling what viruses touching it might transmit. Sitting there, all three of them passively in their places, it had seemed like an afternoon tea party. He hadn't been prepared for her sudden passion. He hadn't seen how far things had gone. He'd been too wrapped up in the way the hair curled on the back of her neck. Had there been something to warn him how things were going? Had there? He stood up.

"I don't think this is such a good idea," he said.

"Oh nonsense," she said, without even turning her head. "What can it hurt? It's dying – don't you understand. It's starving. And we're just sitting here watching it."

"All the same – I think you should come back over here."

But now she wanted very badly to touch her friend. Perhaps that would help her to receive properly – do away with the need for clumsy signing, enable her to understand. She hitched herself up onto the bed, leaned closer.

All his training told him that this was a serious mistake. He opened his jacket, put his hand on his gun, held it on 'safety'.

"You need to step away from the bed. Now."

"Oh, rubbish."

She smiled at her friend and made the sign of the bird. Then she held out the gesture towards the creature in the bed. The alien's bird hands came to meet her's. They touched, and suddenly she knew. But it was too late then.

It was so fast he didn't immediately understand what had happened. Suddenly the beautiful gesture had changed, had flown to her throat, one thumb each side of the carotid artery, the long fingers around the back. The powerful thumbs flexed, there was a crack and the head lolled. The creature bent over what was suddenly a corpse and the thumbs dug into the artery of the neck. Blood spurted briefly, a tube emerged from the sphincter in the creature's face and fastened onto the neat wound it had made. It began to drink.

He emptied the magazine of his gun into it. Before the last bullets had peppered the alien, the bed, the instruments and the woman the room was full of people. They were going to want some very good answers. It would be difficult to explain. It was complicated – what he had wanted, what she had wanted, what the alien had wanted – all of it bubbling under the surface, nothing stated, nothing out in the open, until... Had she been right about the thumbs? Or had it been all about desire? Well, there was only him left to ask, and he was damned if he knew.



Judi Moore is 45; she lives in Milton Keynes. A year ago she began to write full time. Since then she has had three stories published, but this is her first science-fiction story to see print. She is currently crawling up a steep learning curve to finish her first novel.

Tube Corn

Wendy Bradley

I interviewed Jed Mercurio, writer and producer of BBC Scotland's **Invasion: Earth** *(reviewed in issue 132), in the week before the first episode was broadcast.*

Bradley: *For a literary magazine like* Interzone *the quote in the press pack where you say you're a science-fiction fan but you don't read science fiction is heresy. How would you justify that?*

Mercurio: There are different grades of science-fiction fan and I'm clearly at the bottom of the pile! I don't read sf novels, I don't read sf magazines, I don't watch every single episode of every single science fiction on TV, so in some ways I'm a bit of a dilettante. I think, from what I know of the genre, TV and the movies are about two or three decades behind the literature, in terms of the ideas they're dealing with, but the kinds of concept that can be explored in a novel or a short story sometimes aren't cinematic. Really, with *Invasion: Earth* my intention wasn't to bring science fiction on television a whole generation ahead, going beyond what you would see in a quality sf movie or a quality sf television programme. What I wanted to do was to bring British TV sf up to the standard that the rest of the world expected – that was the goal. Obviously if I come back to the genre in future I might well want to push it on further, but at this stage I just thought, you know, that one step was pretty challenging.

I thought the series looked very much like a British take on the Independence Day *type of plot.*

The conceptual strengths of *Invasion: Earth* exceed movies like *Independence Day* by some way, I think. *ID4* was a very simple premise with a very simple denouement – 15-mile-wide spaceships, computer virus, UFO at Roswell. It works very well as entertainment within that but I don't think anyone would consider all those events to be a credible scenario for resisting an alien invasion, whereas what I've tried to do – obviously within the limitations of my own ability – is to put forward a much more credible response to this threat. We don't utilize technologies clearly far in advance of the ones that we already possess. Nor do we take some very simple-minded home-grown technology...

For instance, suppose they're allergic to seawater...

Exactly – or to oxygen, for example. I think obviously if you're going to settle a planet with an oxygen-rich atmosphere you would have thought of that one in advance! It's things like that that I notice in other sf programmes and that I want to have a different slant on. That was one of the things that I was aiming for in *Invasion: Earth*, and I hope that sf fans will be able to spot. But obviously in terms of selling it as mainstream drama our most notable achievement is the look of the series and the strength of the production design and the special effects and so on which I think are comparable to certainly the best of American *television* science fiction. Obviously we don't have tens of millions of dollars to spend on special effects like the movies do...

I certainly thought that was true in episodes two and three but I have to say that I thought the WW2 sequences in the first episode were really cheesy...

That initial sequence in episode one is just a taster and when we return to the subject in episode 3 it functions within the story much better so therefore you're not looking at the effects with such a critical eye, you're following the story, I hope, and thinking that the effects support the story. To some people that opening sequence would send out the wrong signal, it would send out a very *Quatermass* sort of signal. It's unfortunate that that's maybe how some people will perceive it, but I think that once you come out of that into the main story in the first episode, it works as a modern-day thriller. And also in the special effects there's lots there that you might not necessarily be aware of, light-enhancements and fire-enhancements, obviously the aeroplanes and that sort of stuff, all that's computer-generated ... First episodes of anything are tough. Sounds like an excuse!

What I've been saying to people is, you've got to watch this, get past the first 20 minutes. I just wondered if that was the way you felt...?

I'm happy with the first 20 minutes as defining the look of the series. I don't really think that the WW2 sequence is that cheesy and I think that the dogfight and the aeroplane stuff was quite well rendered in the end. Beyond that, once the strands start coming together then I think there's a much stronger through-line. Certainly I find the later episodes, the other 5 episodes, much more enjoyable to watch than the first. Because it is a story which builds. I think that lots of people will watch a first episode and if there's enough there to bring them in for next time, which I believe there is, then they'll watch the next one. Episodes two and three are critical for the viewership: if they come into episode two and think, "this is just nowhere near as good as the first one," then we've lost them, we'll lose them for the rest of the series. What will happen, I believe, is that they will come back to two and they'll want to watch three and then we'll sustain that audience to the end.

I think you're right. Do you have any sense of what kind of audience you're going to get?

Well it's going out at 9.30 on a Friday night and its pitched at the mainstream audience. It's going out prime time, it's not pre-watershed, it's not in a *Doctor Who* or *Star Trek: Next Generation* slot which the BBC think is kind of a minority audience: they're promoting it as mainstream drama. It's going into a slot which they believe recognizes the fact that this will appeal to a slightly younger audience than most mainstream drama, definitely.

We were talking earlier about hierarchies of fans. Do you have any sense of there being a hard-core audience that will watch anyway, and needing to expand on that to the mainstream?

I think that what I've learned from the ratings that other science fictions have got is it does appear that there is an audience which will experiment with any new sf and will give it a try. I don't know what the number is but it's certainly significant. You've also got another audience which would give any new drama a try. And then you've got another audience which will give a new drama a try if they've heard good things about it, or they've liked the trailers or they've read something interesting about it. Quite

how that demographic will in the end be composed I don't know. I know that my work in the past has done extremely well in the 15-35 demographic, which is unusual for drama. What the statistics tend to support on my other stuff – *Cardiac Arrest* and *The Grimleys* – is that the 15-35s actually make up the majority of the audience. And they're light television viewers as well; they're exactly the kind of audience that TV needs to be capturing.

Is there a sense that the fan audience is very loyal but very demanding? Very unforgiving of mistakes, so making the material too much trouble to produce?

I can understand why some programme-makers might have had that opinion but I don't: I appreciate people putting my work under the microscope. Genuine fans of a series who really care about it, obviously feel disappointed if they receive the impression that the people who make the programme don't care about it as much as they do. I think that's what it comes down to. I know that when I was a kid and I enjoyed *Star Trek* I was always very angry at the way the BBC were so cheesy about it and it was all [imitates patronising continuity announcer] "off into outer space now" and all that sort of crap. I just felt that there was some kind of slight joke there and it was on me and I didn't like it, so although I'm not a hard-core sf fan I can empathize with people who care about sf programmes. I care about *Invasion: Earth* a great deal and I was very scrupulous during the making of it to ensure it was as technically accurate as possible ... often to the amusement of the people around me. I like the science to be right and I like the logic to be there.

There are lots and lots of examples – the radar screens had to have the correct altitudes on, and the altitudes had to match the instruments, and so when I was at RAF Leuchars I took a camera into a simulator and shot all the instruments so they would be correct and they would match, and I changed the dialogue in the edit so that everything was consistent. People were behind that, I made it clear that it was something important and my colleagues as a production team were behind that and they just accepted that maybe I was a bit obsessive about it and it was a big joke but that's what got on screen. I hope that hard-core *Invasion: Earth* fans – if any ever appear – will appreciate the effort that was put in. I don't want anyone thinking that they care more about it than I do, because I don't know how they could.

Are you expecting newsgroups on the Internet and fan fiction and conventions?

I'm completely open-minded about that. I mean, I would obviously be delighted if people were so taken with the series that it moved them to do that. I'd certainly not be anything other than appreciative. I'd hope to enjoy some kind of communication, some kind of relationship with the fan group, yes.

Are you on the internet yourself?

No. The BBC want me to do an online chat, which I will do, but no. When I wrote *Cardiac Arrest* I got letters from people within the medical community – some very positive and some with a real axe to grind – and I've got a responsibility as a programme-maker to respond to those and I certainly would do the same with *Invasion: Earth...*

If we print that you're going to be inundated!

Well, it depends; but I would hope that the way it happens is if people do take to it and they have meetings or whatever and I can make it then I'll go along.

I'm writing a book about fan fiction on the internet so that's something I'm very interested in at the moment. Have you read any? I can see the possibilities in Invasion: Earth...

Correct me if I'm wrong, but this is where they take the characters and the set-up and they do their own thing with it? What are the copyright implications?

There's usually a disclaimer – I don't own these characters, no money is being made from this, etc etc.

So what if somebody writes something that's really really good? What do I do? If it's better than I could do...

You e-mail them and offer to collaborate with them on series two!

It's an interesting thought... This is script rather than prose, do they write them in script form?

They do both – and have controversies about which is the better format.

Because there is a novelization of *Invasion: Earth* out in prose form...

Who's written that? Not you, obviously!

No, not me, no, there's been a number of writers working on it. I don't know what the final credit is going to be. That was odd. I read one draft of that and it was very odd to read the characters in prose form. It was quite interesting in a way to see what people thought. The characters cease to be your possession in the way that when an actor or a director has a take on a character it might be quite different from yours but you have the opportunity to discuss it and come up with a consensus, whereas for somebody just to have watched it on television and then go off and devise stories and have a complete take on the character – I think that'd be quite interesting, I'd quite like to read that kind of thing.

You'll have to get on-line.

I'm not going on-line. I am not going on-line!

So how do you write? Are you a notebook-and-pen man?

No, I've got a computer so I word-process. I mean, I work on a computer and that's my job and when I finish my job the last thing I want to do is get on the computer. I don't even play computer games. I don't really watch very much television either. When I'm not working I just want to have a normal life.

Do you read?

Rarely. At the moment I'm going at the rate of reading one or two books a year. I read when I was a kid quite a lot, quite intensely from the age of about eight to 13 or 14 and then got more into other things – sports and socializing and stuff like that, and also academic things become more pressing. When I went to university I began to associate reading with pain and study and I just didn't enjoy reading. I graduated in 1991 and at that stage I hadn't read a novel for years. It was a couple of years after I graduated that I started reading again. I'm still going through a kind of rehabilitation with the written word. I "could do better," I guess is the expression!

I don't think it's an exam! When the newsgroups start up I'll print out some stuff and send it on to you. I'm sure it'll happen.

It'd be interesting, yes. Because I'm obviously thinking that if it's a success and the BBC are prepared to back the series, to the same extent that they did before, that we could go on and do more. Obviously I've got my own ideas of where it will go but it'll be interesting to see what other people think. But I know to get syndication in the US we need a minimum of 60 episodes so it's not really within the near future that that's going to happen. It would be a complete format change, which to my mind wouldn't occur until we were in, like, a fourth series or something. But it is going out in the US – it's in association with the Sci-Fi Channel and they're transmitting it in August, so it'll be interesting to see how it's received over there. Because it's going out on cable as well they will repeat it and have *Invasion: Earth* days and weeks and all kinds of different strandings of it. So, if it does establish itself within the American TV arena, then there might be a lot more money attracted to it.

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Gary Couzens

Rachael is a short woman. At one metre eighty-five centimetres, she would be a midget on my homeworld Triton. Two metres tall, I tower over her. But now change the perspective. On Earth she is by no means undersized – quite the opposite. Among my people I would be the short one. I look most Tritonian women in the eye – many, in the nose, the mouth, even the chin.

"Tell me about your schooldays, Patrick," she says to me. We are in bed together. She stretches like a cat, shaking out her flame-gold hair. Her legs straddle mine: I watch her spine arch, setting the fine dusting of bronze on her pale skin to glittering. I reach forward, my hands covering her hips, caressing the silken globes of her buttocks.

My schooldays. I close my eyes, for there is pain there. To be the midget. Many Tritonians kill themselves and I nearly became just another such statistic. Children are often cruel, and I am determined that my son Sean and daughter Aoife respect other's differences. I miss the warmth of my wife Sinead, and I feel guilty at betraying her. But she will forgive my lapse. I netted them yesterday: a message takes more than four hours to travel from Earth to Triton, even at lightspeed down a vast multi-yottabyte fatline.

Rachael climbs out of bed to pour herself and me a vodka each. Her organic dress – a colourless ball that lay under the bed as we copped – wraps itself tightly about her for Rachael is cold.

Cold: I know cold. On Triton's surface it is 235 degrees below zero.

It was a proud moment when I was selected for Triton's embassy on Earth. At last I felt I had earned my place in society. No longer the midget, the butt of jokes. But then came the reservations. Was I swapping one tyranny for another? I am a giant here, but I am also a *bumpkin*, an archaic word exhumed for fresh insult. We are staid, reactionary, poor cousins, weighed down by gravity. We spend no time in the sun or open air – we have calcium-secreting nanobots and leg supports so that our bones do not snap in Earth g. We are *palefaces, skyscrapers*.

But soon you will listen to us. We have a voice that you will soon hear.

I met Rachael at the embassy reception.

I filed my impressions of the event inside my cortex, so I can replay it now. I'm dazzled by the lights, the drink food and the plentiful drink. I am in the traditional Tritonian garb, worn by both men and women: an ankle-length dress, belted at the waist, in our national colour of midnight blue.

"Mr Patrick Monaghan," says the stentorian voice introducing me to the Earth welcoming party. And the applause, a sound barely known up to now when I am the object.

As we newcomers mingle, I, hungry, inspect the buffet. The centrepiece is a vast synthetic ox – Earth-cul-

tivated of course. The table is laden with delicacies, Earth and Tritonian of course, but also Lunar, Martian, Ganymedean. (I describe it all with visual in that night's net to Sinead and the children, telling them I've arrived safely after a year in suspended animation. It'll be two more years before I meet them again.)

Rachael introduces herself to me.

I gaze down at her. Her hair is piled up on her head and earrings, Martian-cultivated amethysts, dangle from her lobes. Her eyes are green, set in a high-cheek-boned, full-mouthed face. Her organic dress is tonight in the form of a pale blue trouser suit, open far enough to display an ample two inches of gold-dusted cleavage. Sinead is the only woman I have copped with: despite myself, I find I'm fantasizing about Rachael. Such open display is unknown on Triton.

"It's amazing," she says. "I've never met a Tritonian before. You're as tall as I heard."

I knew she'd say this. "I'm short, actually. For a male, that is."

We talk about less painful things. She asks me if I will be visiting my ancestral home, Dublin. I intend to. She was born in Caledonia City, not far away from there, although she grew up in Venus Orbital. She offers to show me the sights of Greater Berlin.

Rachael pads barefoot over to the bathroom. I turn the TV on: a thousand channels (we have three of our own on Triton – selected ones from the rest of the System arrive late over the fatline) and nothing to watch. Sport, music, movies, drama. Even the holographic channels – which we don't have on Triton, though there are plans afoot to introduce them – strain my eyes after a while.

"Are you all right in there?" I call.

Rachael's organic dress rolls in a ball along the floor. She walks towards me, naked but for the dusting of gold. It glitters on her skin, showing off her erect nipples, the plucked russet rhombus of her pubic hair. She squats at the end of the bed, her legs apart.

I know I shouldn't. But I can't help myself.

A couple of days after the reception, Rachael nets me. Do I want to have a meal with her? She will give me a tour of the city. I accept for two days later.

Two days. Two days of talks, briefings, meetings. Two days of remembering my leg supports and not forgetting to inject myself with calcium-secreting nanobots. I've read too many horror stories of Triton-bred bones snapping in Earth g.

On the morning of the day of my meeting with Rachael, I'm lying in bed. I have to go to bed early – partly through exhaustion, partly through the richness of Earth air, lacking the metallic artificial aftertaste born-and-bred Tritonians no longer notice.

I think of Rachael at the reception. I think of the way her organic dress clung to her haunches, emphasized the fullness of her breasts.

And I have an erection.

Although Sinead and I made love the night before I departed for Earth, since Aoife's birth we had mutually entered a state of strong companionship but near-celibacy.

And here I am, only two hours after landing on Earth, fantasizing about a woman I've only met once, who's probably not even available. It's a betrayal of Sinead's trust in me.

But if no one knows, no one is hurt, I think. My penis has its own urgent message. I masturbate. My orgasm is intense, due to more than a year's abstinence (in suspended animation the body remembers even if the brain sleeps) as painful as it is pleasurable.

I meet Rachael at the Wall Memorial, by the ruins of the Brandenburg Gate. I am in the traditional costume I wore at the embassy. Rachael too is in a dress, dark green twinkling with red, yellow, white and gold, fading to translucency about her breasts. She is wearing a musky perfume.

We eat at a Ganymedean restaurant of high repute in the centre of the Eastern part of the city. I'm not used to Ganymedean cuisine, a hot and spice-laden cross between Sichuan Chinese and Indian: the waiter, a charming Ganymedean woman, thoughtfully provides plenty of water.

Afterwards, pleasantly full, the nanobots in my mouth skittering to assimilate the sensory overload, I wait until Rachael orders a taxi.

"Where shall we go... ?" she says in the back seat, her fingers brushing my cheek. Under the skirt of my dress my penis briefly stirs, in memory of this morning's fantasies. "Patrick," she says languidly, "you decide."

"I'm the stranger here," I say. "I'll do what you say."

Her hand slips sideways to massage the nape of my neck. "Oh, all right. I know a place I bet you don't have on Triton." She leans forward and keys in a new destination.

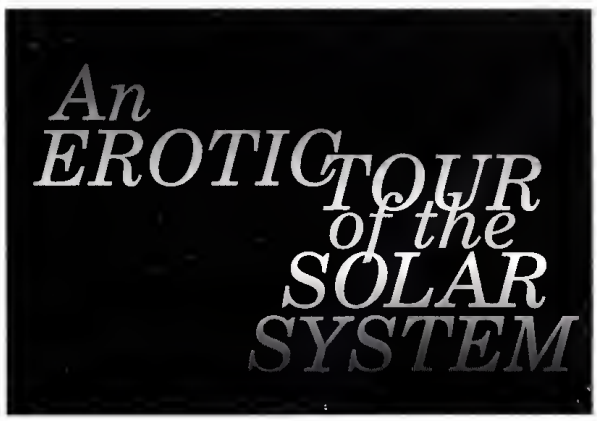
We enter a high building. A lift takes us below street level, a journey that takes a good two minutes. We leave the lift and reach a high door.

Rachael keys in credit for us both.

"What is this?" I ask.

She smiles. "Shhh. Wait and see."

The door opens and I'm in complete darkness. I feel a moment of panic – on Triton there are always stars and the vast blue globe of Neptune – but Rachael puts her hand in mine and I relax. Music plays from all four corners, rose scent fills the room, and then words form in the air before me, three-dimensional and solid:



I shift uncomfortably. Why has Rachael brought me here? Her hand squeezes mine tighter.

The first image fades up: a full-colour, twice-lifesize, realtime hologram of a white man – from Earth, I guess – and a woman (Earth Chinese or Ganymedean), suspended in mid-air, copulating. No detail is missing: I

can even see individual pores on their skin. She straddles him, guides his platinum-dusted penis into her vagina.

I don't want to look. I shouldn't look. But something in me isn't listening to my conscience. Men with women. Women with women. Men with men. Only when an image appears of a Martian woman urinating into the mouth of a Lunar man do I look away, my gorge rising.

Rachael has shed her dress and is naked, her gold dusting glinting by the light of the holograms.

"Do you want to cop with me, Patrick? They have a room at the back where we can do it. I'd really like to cop with you, Patrick."

I cry out, and I run. The door parts to let me through. I'm sick in the lift. I stagger outside into the crowded nighttime streets. People hurry out of my way: I may be small by Tritonian standards, but I'm large by everyone else's.

"Patrick!" Rachael shouts after me as she emerges from the lift, her dress intact again. "Patrick! Come back! I'm sorry!"

I ignore her, and wander for several kilometres before I find a taxi rank and return to my apartment.

Just as I arrive, a net message comes in from Rachael. I instruct my cortex to delete it unread and to reject any further messages from her.

The only other message, just arrived over the fatline, is from my family. Sinead, Sean and Aoife stand in the net booth. Sinead seems older, her grey hairs more noticeable. She's put on weight. Sean has grown: when I return he'll be taller than me. Aoife tells me about her new school, new friends. She's got the angular body of a girl just at puberty, nascent breasts disturbing the bodice of her dress. My children are growing up and I'm missing it all.

The message lasts an hour. Unable to sleep, I watch it three times, tears streaming down my face.

At work the next day, I'm conscious that my colleagues are staring at me, sniggering behind their hands when I'm not looking. They – or at least the longtermers on Earth – are sick of the Tritonian bumpkin stereotype, and so affect a cosmopolitan sophistication. But now a *real* bumpkin has landed in their midst.

I ignore them. Fidelity is my way, however naive they may think me. I will never stray again. I concentrate on the report I have to prepare, using all the conscientiousness that won me the job in the first place.

Tired by the work and my lack of sleep last night, I return to my apartment.

Rachael is waiting at the door.

At first I want to ask her to leave – I have nothing to say to her – but she smiles. She holds out a bottle of champagne.

"I'm sorry, Patrick. I behaved badly last night."

I say nothing.

"I should – I should have respected your differences."

"Yes you should. I'm married. Happily married."

She looks up at me. "I'm sorry. I made an advance and I shouldn't have. I hope I can make it up to you."

"I accept your apology."

"May I come in? I think we should talk."

Something inside me warns me not to let her in. But, I think, talking can do no harm. And she is so demure, her organic dress covering her from neck to ankle in a trouser suit, and she smiles so sweetly, that I can't refuse her.

"Yes, of course. Come in."

She makes appreciative noises about my apartment but I know it's poor and small. I'm a Tritonian, and a minor functionary at that, only on Earth for a year. As she gazes at the holographic artwork on my walls, I suddenly feel tired. I slump down in an armchair.

Rachael turns, her mouth an O of concern. "Patrick! Are you ill?"

"No, I'm tired. Very tired. I didn't sleep last night."

"Oh you poor thing." She moves to stand behind me, rubbing my shoulders. "You're all tense. Relax."

She is expert, and after a few minutes of her massage I do indeed relax.

"They always did tell me Tritonians were – let's say, sexually conservative," she says. "But I didn't realize how true it was."

"That is our way."

"Did you know they charged me for the mess you made in the lift? They had to ventilate it. Ganymedean-flavoured vomit leaves a lingering smell."

"I'm sorry. I'll pay you back."

"Don't be silly. I shouldn't have taken you there. Actually," she laughs, a high peal, "you didn't get to see the two Tritonian men copping. *Very* aesthetic. I wondered how you'd react to that."

"That is not part of our culture."

She's so surprised that she stops mid-massage, her fingers on the nape of my neck. "*Really?* You mean, on Triton men don't cop with men?"

"We turn a blind eye. It's not encouraged."

"What about women with women?"

"Likewise."

"You mean, it's only men and women?"

I nod. "We prefer it if they're married."

"That's crazy. There's a whole universe out there. Why limit yourself?"

"It's not our way."

"Haven't you ever – don't you ever fantasize about... oh, I don't know, don't you ever want to cop with a man?"

"No I do not. I find that distasteful."

I can't see her, but I can feel her bewilderment in the set of her hands on my shoulders.

"I bet you've only ever copped with your wife."

I don't answer, but my blush betrays me.

"You must think I'm a bumpkin."

"No. I don't."

"You all think we're backward."

"No, it's... charming. Almost quaint. Patrick, part of me pities you, Patrick. Part of me thinks it's wonderful there are people who still live that way."

And she resumes her shoulder massage.

As she does, she talks some more: "Actually - I'm telling you a secret here – when I was growing up on Venus Orbital they wanted me to see a psychiatrist because I only wanted to cop with men. They were right. I didn't know what I'd been missing."

I want to change the subject. "You're a very good masseur."

"Thank you. I passed my Grade Alpha last year. I'm

fully qualified. Male and female. Full body."

"I might take you up on that." What am I saying? This is flirting. It was intended as jollity, but it falls painfully flat.

Rachael chuckles politely. "Why are Tritonians so tall, anyway?"

And I tell her. She sits on the floor in front of me, cross-legged, schoolchild posture, as I relate the history all Tritonian schoolchildren are told. I tell her about the Inner System War of a century ago, when the fatline failed – sabotaged – and all contact was lost with the rest of the Solar System. Shortly afterwards, in a Martian bombing raid, there was much loss of life and the artificial gravity was irreparably destroyed. The fatline was not restored for forty years, by which time two generations had grown up in very low g. Most of those who remembered the artificial Earth g had died by then, so when Earth offered to restore it we declined.

I tell Rachael about my childhood on Triton. And all the pain follows: the bullying, being picked on because I was undersized. By this time Rachael is massaging my legs, pushing up the hem of my dress.

I'm uncomfortable – I know I shouldn't, but I feel a desire for Rachael that has become overwhelming. I do nothing as she parts my legs and her head disappears under my dress. She takes my penis into her mouth. I climax within seconds.

Rachael climbs back into bed and straddles me, lightly clasping my glans between the lips of her vagina. We make love – no, we cop – for longer this time, finishing in my final painful voiding of semen and her own orgasm, shuddering and gasping, her nails digging into my back.

We lie together facing each other, the sweat drying on our bodies and into the sheets.

"That was good," she says. "Thank you." And she kisses me full on the mouth. Counting her initial brief fellatio, we have copped three times tonight.

Too exhausted to cop again, we lie together, drifting towards sleep, talking. But we don't sleep and soon through my window we watch dawn break over the Wall Memorial.

"It's beautiful," I say.

Chin resting on my chest, she hugs me.

"Do you have dawn on Triton?"

"Sunrise is nothing. Neptune-rise is awe-inspiring, first time you see it. Especially if it comes up rings first. It almost fills the whole sky. I never grow tired of it."

"I bet you don't. I bet you're homesick."

"I am." There's a catch in my voice. I don't want to think how I've betrayed Sinead.

"I'd love to visit Triton one day. I want to see the ice volcanoes."

"You'll hate it. It's so cramped. We don't have the amenities you have on Earth."

"But it'll be an experience. I like to have experiences."

"So I've heard."

She laughs and lightly punches me on the hip. "Don't be like that, Patrick. I don't think you're backward at all. You've just lived a different life, that's all. I respect your differences."

"You all say that on Earth. You never mean it."

She makes a moue. "Patrick, I *do* mean it."

"I'm sorry. I didn't mean you. I meant Inner System people as a whole. You tried to destroy us during the war."

I don't know why I'm saying all this. Perhaps the night's copping has unlocked something inside me: lancing a boil, so all the pain comes pouring out. I can talk to Rachael, whom I've only known a few days, in a way I can't with Sinead.

"Patrick, I wasn't even *born* when that happened. You can't blame me for that."

"I'm sorry, Rachael." Tears are in my eyes. She hugs me. "Coming to Earth has brought that out in me."

"Better to get it out. We're not all like that, Patrick. We do respect you. You Tritonians."

"Respect."

"Yes, that's right." She rests her hand over my heart: it's beating fast. "I'm glad I can help you."

We hold each other in silence.

"Is it true?" I say after a pause. "Is it true you do respect us?"

"Most of us. Anyone of any intelligence, that is. You're part of the human race. You just look different."

"You're going to have to take notice of us soon."

She sits up. "Patrick... ?"

I look away. "I've said too much. I'm sorry."

"Patrick, what did you mean by that?"

I say nothing.

"Patrick, I want to know what you mean by that."

I swear her to secrecy, and then I tell her what I know. Three months before I left Triton, a group of scientists took a wrong turning (a potentially fatal error) on the Cantaloupe Terrain. And they found... wreckage. It had been brought to the surface by one of Triton's periodic freezes and thaws. It wasn't War debris. It wasn't human-made. And they found traces of something else. There wasn't much of it, smeared over the bits of metal. It had long since frozen solid, and it crumbled if you touched it. But once it had been part of a silicon-based lifeform.

No-one yet knows how many millennia it had been there. When I left, scientists were still running tests. Everyone had been sworn to secrecy (the Tritonian powers that be wanted to release the news when it would be to their best advantage), so there's no way I on Earth can find out anything over the fatline. But one thing was certain. After more than three centuries of searching, after so may possible leads had come to nothing, humanity had finally uncovered prima facie evidence of life from outside the solar system.

Of course no one ever imagined it was native to Triton. An alien ship had passed by – no one could conceive of how long it had been travelling. Until someone could date the wreckage, it might just as well have been in the time of the dinosaurs or the Cambrian explosion of life. Or even earlier than that. Maybe the ship had gone out of control – who knows? And it had crashed on Triton's surface, killing everyone – everything – inside.

I make Rachael breakfast, then she leaves.

"I'll see you again soon." She kisses me on the mouth. "You're a good lover."

I sit down in my armchair. After two sleepless nights, I should call in sick and spend the day catching up. No one will think anything of it. Earth Acclimatization

Sickness is a known, though unofficial, Triton malady. The air and the gravity take some getting used to.

And suddenly I'm violently ill.

I rush to the bathroom just in time to be sick in the toilet.

POISON, my nanobot sensors shriek. *CONTAMINATION.* A datadump in my head:

A cocktail of tailored viruses, an aphrodisiac and blockers to prevent my body's sensors from detecting it. That was administered last night. And again tonight, except the second time the aphrodisiac was stronger. Entry point both times: the nape of my neck.

Rachael's massage.

The second incursion was nanobotic, an altered version of those carried in the mouth. This one carried a truth virus and the same blockers as before. This was administered once only, tonight. The entry point was my penis.

I call in sick. Sometime soon, when I go into work, I'll find my access revoked. I'll be arrested, if they don't find me here first.

We tried to keep our discovery secret. But perhaps someone said something indiscreet over the fatline, dropped a hint. And someone else wanted to know just what those paleface skyscrapers had to hide.

Rachael had the job of finding out.

And now they know.

Not only have I betrayed my wife, but also my homeworld. I've violated the Secrecy Act I signed on my first day here. I think of the shame Sinead will have to face. And the bullying Sean and Aoife will endure, children of a traitor.

Off-planet convicts don't go into suspended animation when they're deported back to their homeworlds. A voyage-long solitary confinement – in my case a year – to reflect on what they've done. And if they kill themselves mid-voyage, so much the better.

There is one commandment, one cold equation, underpinning life on Triton. If we don't co-operate with each other, someone dies.

But we Tritonians have an honourable way out. I'll drive a rover out onto the surface. Above me I'll see the yellow pinpoint that is the sun. The vast blue ringed globe of Neptune. The careering rock that is Nereid. Maybe some of the other moons and some of the inner planets too. And there, out of sight of my fellow Tritonians, I'll say my prayers then remove the helmet of my spacesuit.

That is the Triton way.

Thanks to Dawn Brookes

Gary Couzens, born 1964, has contributed one previous story to *Interzone* – "The Facilitator" (issue 108). An earlier story, "Second Contact," appeared in *The Magazine of Fantasy and Science Fiction* (March 1994) and has just been reprinted in the small-press anthology *Gravity's Angels* edited by Couzens and friends (£4.95 from T Party Writers' Group, Flat 2, 123 St Michael's Rd., Aldershot, Hants. GU12 4JW).





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The day before THEY CAME

Mary Soon Lee

The morning before the aliens came, Molly Harris busied herself preparing her son's lunch-box. Since it was a Friday, Justin would be going to school in person for his social skills classes. Molly put a generous handful of cherries into the lunch-box. Even the vat-grown cherries cost more than she could really afford, but she wanted Justin to have a treat to swap with the other second-graders.

Most of the younger mothers Molly knew worried when their kids went to school, checking the germ count hourly, scared their children might come home with a bruise, or a scrape, or a runny nose. But Molly had been 53 when Justin was born, and she remembered when classroom violence meant knives and guns, the way her heart had thudded during the weekly bomb drill.

So instead of worrying about Justin on Fridays, Molly worried about him on Monday through Thursday. She would peek into his bedroom as she moved around the apartment. No matter how absorbed Justin looked, the tip of his tongue sticking out as the computer led him through a problem, Molly couldn't convince herself that it was right for a child to spend hours on end netted-in.

A terrible din erupted from Justin's bedroom: screeches and bleats, neighs and howls and squawks. Molly slapped her hands over her ears. She had bought Justin the Noah's Ark alarm clock for his sixth birthday, a year ago.

The din subsided for a moment, but Molly wasn't fooled. She kept her hands pressed to her ears as the alarm clock exploded into the deep bass trumpet of the elephants. In the silence that followed, Molly wiped her hands on her apron, then reached for the peanut butter jar.

Sounds of hasty splashing came from the bathroom, followed by bare feet running toward her. Two thin brown arms, somehow sticky despite the bathroom expedition, wrapped themselves around Molly's waist.

"Morning, Mom."

"Good morning, Justin." She stared down at the top of her son's head, pressed tight against her stomach, his fine black hair tousled.

"It's my birthday tomorrow."

"Really? I don't believe you."

Justin let go of her, and rolled his eyes exaggeratedly. "Yes, you do. You do, you do."

"I do," said Molly, wishing he had hugged her a little longer. "Tomorrow's your birthday, and we're going to the water park. But today you have to go to school."

"Uh huh." Justin poured the milk onto his cereal, holding the milk carton in both hands, and managing not to spill any.

Breakfast took less than five minutes, and then Justin clattered down the staircase ahead of her, down the four flights to the porch to wait for the school bus.

The bus came early. One quick hug, and Justin scrambled on board.

The afternoon before the aliens came, Molly went birthday shopping. The city tax paid for glass roofs over the downtown streets. Molly told herself she approved of such a sensible precaution against the ultraviolet, but the enclosed air seemed stale despite the constant whir of fans, and the filtered sunlight seemed somehow flatter.

Molly spent half an hour choosing new swimming trunks for Justin. She couldn't decide between a pair covered with dapper penguins and another pair with plain blue and yellow stripes. Six months ago she would have bought the penguins without hesitation, but perhaps Justin would think them too childish now.

She tried to remember what his best friend, Adam, had worn the last time she took the two of them to the water park. Something simple she thought. She paid for the blue and yellow striped trunks, secretly yearning for the penguins.

Outside again, the air temperature fixed at the calculated summer optimum, warm but not hot. Perversely Molly wished the system would break down, even for an hour or two, just long enough for a mini heat wave. She paused for a minute, remembering playing on the beach one summer holiday. The sun had burnt the back of Molly's neck, too hot, too bright. Her face had stung from blowing sand. And yet everything sparkled, the very air buoyant, as if she breathed in tablespoons of undiluted joy.

People surged past Molly as she stood there on the downtown street. She pulled herself together with a shrug. She would have loved to take Justin to the beach, but no use dwelling on it now.

She set off again, heading for the AI store. She knew how much Justin wanted a pair of AI shoes, but even though most of his class had them by now, he had only asked for them once. When Molly had told him they

cost too much for her to buy, he bit his lip and never asked again.

So two months ago, Molly had cancelled her subscription to the interactives, making do with ordinary TV, and she thought she had saved enough to buy Justin his shoes.

Entering the AI store, Molly blinked. The floor, ceiling, and walls were velvet black. Glowing holograms danced to either side, marking the corridors. Molly took one cautious step forward.

"Can I be of assistance?" A caterpillar-shaped mechanical appeared in front of her. The mechanical raised the front of its long body until its head was level with her chest, its silvered skin gleaming.

"I'm looking for AI shoes."

"Please follow me." The mechanical started down a corridor, turning its head to check she was following. It stopped by a vast array of shoes. "First select a shoe-style, and then I will demonstrate our selection of AI personalities."

Molly nodded, trying to look as if she came to shops like this everyday. Sandals and ballet shoes, ice-skates and boots and babies' bootees stretched before her. After a long pause, she pointed at a pair of orange sneakers. "How much are those ones?"

"Eighty dollars, without any program installed. Did you have a particular AI personality in mind for the shoes?"

"No. They're for my son. He's turning seven."

"Perhaps an educational supplement?" The mechanical lifted its forelegs to a small keyboard, and typed in a command.

The left sneaker twitched. "What's two times 26?" asked the orange shoe.

Molly said nothing. The mechanical made a throat-clearing noise, though she knew it didn't really have a throat. "Fifty-two," said Molly.

"That's right!" said the shoe. "What a clever girl!"

The right shoe twitched beside it. "Two times 26 is 52, and do you know how many states there are in America?"

"Fifty-two," said Molly. She looked at the mechanical. "I wanted something a little more fun."

The mechanical keyed in another command.

"*Let's all sing to the sing-along-song*," sang the two orange sneakers.

Molly shook her head. "Definitely not."

She declined the next dozen offerings. The cops and robbers program amused her, but she had overheard Justin and Adam discussing how old-fashioned police games were. Finally she settled on a program with no gimmicks at all. The left shoe and the right shoe just chatted away as if they were children; the left shoe, Bertie, was a little bossier, the right shoe, Alex, seeming shyer.

The mechanical wrapped up the shoes in orange tissue paper inside an orange box, explained how to switch off Alex and Bertie's voices, and assured her the program automatically deactivated during school hours.

Molly clutched the gift-wrapped shoe-box to her all the way home on the bus, picturing Justin's reaction the next morning.

The evening before the aliens came, Justin was hyperactive, overexcited about his coming birthday. Molly gave him a mug of hot milk, hoping it might calm him. But still Justin scaled Mount Everest (the sofa and the shelves beside it), using his scarf and six kitchen forks as equipment.

"But what if my birthday doesn't come?" demanded Justin, as he sat triumphantly atop the mountain peak, having retraced Sir Edmund Hillary and Tenzing Norgay's route along the Southeast Ridge.

"Of course your birthday will come, silly."

"What if there's a fire, and my presents are burned?"

"There won't be a fire," said Molly, lifting Justin up, and sitting him on her lap, back down at first camp. "But if there were a fire, I'd get you more presents. I promise. And now it really is time for bed."

"Just five more minutes, Mom. Please."

"Okay," said Molly, and watched him set off on a second ascent of Everest. She would have liked to have someone to share Justin with, to sit beside on the sofa while Justin played, to talk to when Justin fell asleep. Justin had aunts and uncles, but that wasn't the same.

Molly had waited till she was past 50 before she realized Mr. Right might never arrive. Her sister had accompanied her to the family planning clinic, waited patiently while the official checked that Molly hadn't already used up her one-child quota. Then Molly and her sister picked a father from the database, a gentle-eyed biochemist, with long fingers and a talent for playing the cello.

Molly knew it was silly, but from time to time she dreamed about Justin's father, wanting to tell him all about his son. She checked her watch. "Time to sleep."

She tucked Justin into bed, read him a chapter from *Watership Down*, kissed him once, trying to hold onto the moment as she had tried to hold onto every moment of his childhood, forcing herself to let go until the morning.

The night before the aliens came, Molly watched two mediocre comedy programmes on TV, then got up to make a mug of cocoa as the late night news came on. She heard something about a group of meteors detected by the deep solar tracking system. Half-curious, thinking about the shooting stars she'd seen one night a decade ago, she wandered back to the living room.

A triangular formation of blue and green dots flickered on the TV screen, somewhere out past Saturn, according to the newscaster. *Past Saturn.* For a moment, Molly rolled the words around in her mind; it sounded like the start of a fairy tale, "Far, far away... ."

With a shake of her head, Molly turned off the TV. Time for bed. She knew Justin would be up early tomorrow. She paused by Justin's room, opened the door a crack for one last peek at her son, fast asleep. Silently she closed the door.

Mary Soon Lee has published two previous stories in *Interzone* – "Assembly Line" (issue 98) and "The Tinkerbell Theory" (issue 102). Of Hong Kong parentage, and British born and raised, she now seems to be thoroughly at home in the USA (Pittsburgh, PA), where she has published a number of other stories.

http://www.user

Keith Brooke

I run *infinity plus*, a science-fiction and fantasy showcase on the World Wide Web. It features the work of over 40 professional authors, including some of my favourite writers. It takes up a large proportion of my time, and has won praise from the likes of Ellen Datlow and Rodger Turner, webmaster of the *Asimov's* and *Analog* web-sites.

As Algis Budrys says of 'net publishing: "No matter how you plan, it'll find a way to work out differently. And more than once."

He speaks the truth: it was never meant to be like this.

In my day job I develop multimedia learning materials and increasingly I've used the Internet in my work – at first for research and to find photographers to contribute to projects, and later both as a promotional tool (http://www.chelt.ac.uk/sci-env is one example) and as a delivery medium in its own right.

Back in the spring of 1997 I decided to set up my own home page. But I didn't want to do just another midlist author's home page: if I was going to do it, I wanted to do something just a little different.

It occurred to me that it might be interesting if there was more than a single contributor. One weekend last summer I went up to Haworth to visit Eric Brown. Rather tentatively, I asked him what he thought about putting one or two stories on the Internet.

His enthusiastic response set me thinking. Taking Eric as an example, there must be quite a few authors out there who would like to promote their work on the 'net but simply don't have the skills to do so. The idea of republishing favourite stories in the hope of finding new readers appealed to us both – as Eric puts it: "It's nice to know that there's an intelligent repository out there for stories which have been and gone in magazine form."

Back at home, I put together an invitation, setting out the aims of the site: "Science fiction and fantasy still share a (relatively) thriving short-fiction market, but what happens to the stories once they've been published? Sure, some of them get picked up for reprints or translations, but a lot of excellent work becomes hard to get hold of a very short time after it first appears. I want to make some of these stories available again." And I came up with a name: *infinity plus: the sf & fantasy archive*.

I sent the invitation out to a few friends. The response was positive. I started to realize that this thing was going to be rather bigger than I'd expected. I'd wanted to do something just a little different. I just hadn't realized *how* different.

By the time I launched *infinity plus* at the end of August 1997, the list of contributors exceeded 20 names, including Stephen Baxter, Ian McDonald, Ian MacLeod and Molly Brown.

There's an awful lot of junk on the 'net and, as Ellen Datlow comments, "Right now, it's hard to separate the good from the bad sites. Everyone and every company has a web-site, most of them just boring advertisements with no feel for the web at all." To distinguish *infinity plus* from the crowd, I took a deliberately elitist approach: *infinity plus* wasn't open to submissions, it was by invitation only and I only invited professionally published authors. (This also had practical benefits: I have a full-time job, I write, I have a young family – I simply don't have the time to deal with a slush pile.) Now that the site is established, I've started to introduce newer writers, but I still don't have the resources to handle unsolicited submissions. Maybe one day...

By this stage, the site's contributors weren't only those who lacked the technical knowledge to set up their own home pages: it soon emerged that even those with home pages were attracted to the idea of taking part in a collective venture like *infinity plus*. Like sex, you can do it alone, but it's far more fun with other people (although perhaps it's a bit excessive when the number reaches double figures...).

Although Molly Brown already has a successful home page of her own, she was attracted to the idea of a group home page, with its implication of people pulling together for a common purpose. "It appealed to the old hippie in me," she told me. "I'd much rather have my stories appear in company with others, especially among the kind of people you've managed to pull together on *infinity plus*."

Although *infinity plus* started out as a predominantly British site, I wanted it to become as cosmopolitan as possible. One day I came across the home page of James Patrick Kelly, a writer I've always admired. Right at the start, he says, "In general I enjoy the writing life a lot, but I do have one complaint. Sometimes it seems as though the stuff I write has the shelf life of lettuce! A story appears in a magazine and a month or so later it winds up in a corner of some basement – or the landfill. Even books come and go with alarming speed. That's why I wanted a home page: so I can get some of my stuff out of the filing cabinet and back under the eyes of readers." I contacted him, saying that this was exactly the reason I'd launched *infinity plus*.

He responded as enthusiastically as everyone else had: "I guess I was attracted to *infinity plus* because I believe in the concept of a reprint science-fiction web 'zine and I had yet to see it carried off as well as you had done. The fact that you had already attracted several people whose work I admired was also a plus. From a purely economic point of view I see my story as a kind of advertisement for myself and *IP* seems like a good place to showcase it. I could just put the story up on my own site, but then it would only find an audience of people who were interested in Jim Kelly. Putting it on *IP* helps me reach the wider audience of people who are interested in quality short stories."

Soon I started to get approaches from prospective contributors. Jeff VanderMeer read about *infinity plus* in *Locus*. Like most of us, he prefers to be published in conventional print markets, but he wanted his work to appear in *infinity plus* for reasons similar to Jim Kelly's: "I visited the site because it sounded intriguing. I liked the layout and design very much, but the reason I wanted my work to appear there was because you had work from writers I very much admire ... since you were willing to take reprints, I saw a chance for one of my better stories, unfortunately obscure, to get more exposure in a quality setting."

Kit Reed, celebrating her 40th year in the business, came across *infinity plus* when she was searching for sf sites she could link to from her new home page. "I liked the layout and the association [her webmaster is based in the UK] ... I thought, what

:etnet.co.uk/iplus

could be cooler?" As well as contributing a story to *infinity plus*, Kit mentioned the site to some of her friends, and soon Terry Bisson was in touch with me, asking to join in the fun.

The core of the site is the fiction: "The beauty of *infinity plus* is that unlike an anthology it's a constantly growing and expanding entity," says Eric Brown. "You might pull a landmark anthology from the shelves now and again, but with *infinity plus* you can go back to it again and again and it will never be the same."

Eric also makes the point that there's far more to the site than just the fiction – again, a development I hadn't quite anticipated when I started out. There's a growing archive of reviews (some of which have been adapted for use in *Foundation*, reversing the general principle of print first, then 'net) – many of these are far longer than those you would find in most magazines. There's also a range of essays, including pieces by David Langford, David Garnett, Vonda McIntyre and Ken MacLeod.

In December 1997 I received an e-mail from David Mathew, a new writer whose reviews and interviews have appeared in *Interzone*, *The Literary Review* and a number of writing magazines.

New to the world of the Internet, one of the first things Dave did when he got on-line was to investigate two adverts he'd seen in *Interzone*: Geoff Ryman's *253* and *infinity plus*. Dave now writes reviews for *infinity plus*, and I've republished a number of his interviews (with David Pringle, Phil Rickman and Kim Newman, among others).

He had two main reasons for offering his services, both of which are common to most of the site's contributors. One was simply that he liked the site and was keen to support "a new venture that carries the torch for the genres in the way that *infinity plus* does."

The other reason is more down to earth: "Although I've been publishing professionally since I returned to England from Poland in February 1996, I only went full-time on October 6, 1997. I quit a job that paid okay (but which I hated) to do a job that pays very poorly (but which I love). I figured then and I still believe now that the only way I will ever make any proper money from my writing is by sheer bull-headed hard work; by doing as much as I possibly can. By spreading the word that I was around, and by trying to get my name known a little bit. I saw your site as a possible avenue to do just that." A number of people have been in touch with Dave since his work started to appear on the site, so his approach seems to have paid off.

People have ended up at *infinity plus* in a number of ways: through adverts or mentions in *Interzone*, *Locus* and *Matrix*; through links from other sites; as a result of searching the 'net for genre sites; through blatant self-publicity on my part...

The semi-chaotic nature of the 'net is one of its attractions: you can stumble across all kinds of sites quite by accident. Prospective readers can end up at a web-site for any number of reasons.

Since setting up her *Invitation to a Funeral* web-site, Molly Brown has received a lot of junk e-mail addressed to her as webmaster of an "adult site." A look at the visitor statistics reveals why: "I've had someone who was searching for 'whippings' get sent by Alta Vista [a site that searches the 'net using keywords supplied by a user] to my page on Bridewell. A search for 'Spanish' and 'bitch' brought some poor soul to my page on Whitehall Palace, and so on. Then there were a huge number of referrals from the search engines after Diana died, because of all the people searching for details of either St James's Palace, and/or 'funeral'."

One thing I've noticed with *infinity plus* is that there are significantly more readers during the week, despite UK 'phone calls (and hence Internet use) being cheaper at the weekend. There must be an awful lot of people who surf the 'net from work.

(And how do I know this? I keep an eye on things from work, of course...)

Infinity plus is all free, and I have no idea how long it'll continue to grow. There must be a finite limit to the amount of material professional authors are willing to give away in the hope of attracting new readers. Yet, nearly a year after I started, interest is continuing to grow.

One of the reasons the project has struck a chord with so many authors is one of the basic frustrations of the writing life: we write these stories and novels out of a need to communicate with people, yet the publishing process means that a lot of our work – particularly short fiction – becomes unavailable almost as soon as it's been published. The 'net makes it possible to breathe some life back into our favourite creations, a chance to show off our favourite work.

As I said at the start, it was never meant to be like this. But I'm rather pleased that it is.

(My thanks to Eric Brown, Molly Brown, Ellen Datlow, James Patrick Kelly, David Mathew, Kit Reed and Jeff VanderMeer for their help in preparing this article.)

infinity plus –

some stories you might not have seen before:

As well as republishing stories from high-profile publications (*Interzone*, *Asimov's*, *The Magazine of Fantasy and Science Fiction*) there are also stories from more obscure sources. Some of these are:

"Cyberpunk"
by Bruce Bethke
(plus a foreword discussing how he invented the c-word)

"The Phoenix Experiment"
by Eric Brown

"Asleep at the Wheel"
by Molly Brown

"Fidelity" by Christopher Evans
(his first published story, slightly revised for *infinity plus*)

"Double Negative" by Jason Gould

"Softlight Sins" by Peter Hamilton
(previously only available as a Novacon chapbook)

"Some Strange Desire"
by Ian McDonald

Other contributors (not mentioned elsewhere in this article) include: Patricia Anthony, Sarah Ash, Michael Cobley, Jack Deighton, Lisa Goldstein, Colin Greenland, Jon Courtenay Grimwood, Garry Kilworth, Paul McAuley, Yvonne Navarro, Stephen Palmer, Nicholas Royle, Freda Warrington and Jonathan Wylie.

CREATORS OF SCIENCE FICTION, 11:

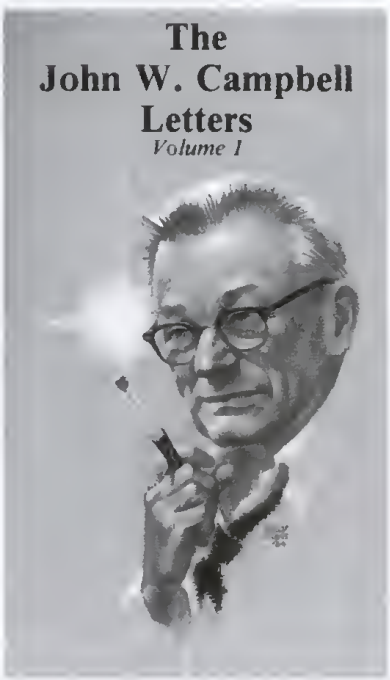
JOHN W. CAMPBELL

Brian Stableford

A recent BBC documentary about Asperger's Syndrome observed that a disproportionate number of sufferers had fathers who were engineers. Currently-fashionable opinion alleges that Asperger's Syndrome bridges a wide gap between autism and normal male behaviour on a spectrum of mental disconnection, describing the mind-set of those individuals (almost all of whom are male) who are not so severely afflicted that they cannot relate to other people at all but are nevertheless prone to obsessions which take priority over social interactions: hobbies, collections and so on. Asperger's Syndrome apparently causes the brain to be much better at handling abstract ideas than interpreting human behaviour – in cases where it produces no acute symptoms it is, in effect, God's gift to would-be engineers, theoreticians and lawyers.

As with the less problematic manifestations of Adler's inferiority complex, a mild case of Asperger's Syndrome might be reckoned by some to be a more desirable state of being than mere normality. Ordinary people sometimes find it difficult to cultivate the narrow focus and relentless preoccupation which are required for outstanding success in a specialized field; many are too easily distracted by the demands of family and fun. Anyone who aspires to be a mover and shaker in a specific endeavour, especially one requiring mental abstraction, requires a strong sense of vocation. It is at least arguable that no *real* man – in an intellectual rather than a brutal sense – would want to be without a slight touch of Asperger's syndrome, even if he had to bear the cost of finding other people's emotional states difficult to read or respond to. (1)

John W. Campbell senior – whose own father had been a lawyer – was an engineer working for Bell Telephone in New Jersey when his similarly-named son was born in 1910. Sam Moskowitz records (2) that the young John junior "had virtually no friends" and that "his relationship



with his parents was emotionally difficult" because "his father carried impersonality and theoretical objectivity in family matters to the brink of fetish" and "almost never used the pronoun I." His mother, by contrast, seemed to young John to be "flighty, moody, and ... unpredictable from moment to moment" and he was "baffled and frustrated" by her "changeability." She also had a twin sister who lived with the family, who seemed to the young boy to be extraordinarily hostile to him. It is, of course, direly dangerous to offer diagnoses on the basis of such distant reportage, but it is probably safe to say – taking into account later developments as well – that there were few people who were in their teens during the heyday of pulp fiction better qualified than John W. Campbell Jr to become the most obsessive science-fiction fan in the world.

In the last article in this series I observed – somewhat controversially, it seems – that Hugo Gernsback's credentials as "the father of science fiction" were acquired by virtue of a relatively casual act of procreation, and that he quickly abandoned the fledgling genre. Had the infant been left to fend for itself it would have turned into an exact replica of all the other wayward kids on the same slummy block. We know this perfectly well because we know exactly what happened to the two ex-Gernsback magazines, *Amazing Stories* and *Wonder Stories*, when the former fell into the care of Ray Palmer and the latter became *Thrilling Wonder Stories*, both featuring garish pulp adventure fiction aimed at unsophisticated teenagers. Their foster-parents were not to blame; Palmer and Leo Margulies were following the dictates of logic and nature – but their newest neighbour, *Astounding Stories of Super-Science*, did not go the same way. After a slightly shaky start it was adopted by a father who was fully prepared, and fully equipped, to lavish far more consistent attention upon it than had ever been lavished upon him.

Hugo Gernsback may have been the bibliographical father of science fiction, but John W. Campbell Jr was the man who raised it and educated it in his own image, taking the infant *Astounding Stories* and transforming it, by slow degrees, into *Analog: the* magazine for speculatively-inclined engineers.

After serving four years as a high-school misfit John Campbell Jr studied at the Massachusetts Institute of Technology. He was already a regular reader of *Amazing Stories* and his imagination was greatly inspired by Edward E. Smith's *The Skylark of Space*, which became a key model for his own early writings.

The first story Campbell submitted to *Amazing* was accepted but the typescript was lost. The second – the first of five stories he published in 1930 – was "When the Atoms Failed," a story in which the future use of atomic power is superseded by a technology of matter-destruction, whose practicability is proved by an

electrical calculating machine. The bulk of the story consists of a lecture delivered by the protagonist to an admiring but scientifically naive friend. A sequel, "The Metal Horde," swiftly followed, similarly employing an alien invasion as the necessity which mothers the protagonist's further inventions.

"The Voice of the Void," set ten billion years in the future, uses the cooling of the sun as the spur which drives mankind to perfect faster-than-light travel, although their subsequent colonial endeavours bring them into conflict with sentient but immaterial "pools of force" nourished by atomic energy. Unlike the earlier stories, this was an exercise in exposition, whose subject-matter and manner both suggest that if Campbell had not yet read Olaf Stapledon's recently-published *Last and First Men* then he had certainly read its blueprint, J. B. S. Haldane's fictionalized essay "The Last Judgment."

Campbell did not reprint any of these three stories in his subsequent collections – although his other 1930 publications, the more orthodox space operas "Piracy Preferred" and "Solarite," were reprinted along with a further sequel in *The Black Star Passes* – but between them they laid the groundwork for the greater part of his subsequent work. Although the space opera series begun with "Piracy Preferred" continued – escalating its scale with each new phase – in *Islands of Space* (1931) and *Invaders from the Infinite* (1932) it was his shorter stories that became and remained his primary laboratory of thought.

Campbell's dependence on his writing income increased when he married Dona Stuart in 1931, shortly after being thrown out of MIT without a degree. Some of the stories he turned out in the next year or so, while completing his degree at Duke University, are utterly trivial, but ideative threads already anchored in "When the Atoms Failed" and "The Voice of the Void" were extended to a logical limit of sorts in "The Last Evolution" (1932), a quasi-Stapledonian story in which mankind's heirs give an account of post-human evolution. Here, the pressure of alien assault results in the devastation of Earth's ecosphere, leaving the war to be continued by intelligent machines far less frail than their organic makers – but these "beings of Metal" are superseded in their turn under the same evolutionary pressure, yielding to superior "beings of Force" which use "the ultimate energy of annihilating matter" to defeat the Outsiders. One of the machines, Roal, delivers a curious eulogy for mankind, and for organic life itself, suggesting that the end of life might have been "ordained" and "right" because Man, like all living things, was "a parasite" and "a makeshift" destined to be replaced by machines capable of truly independent life and of directing their own evolution towards the production of the ultimate "beings of Force." (3)

The idea that immaterial entities of "pure force" or "pure thought" might be the end-point of all evolution was not original with Campbell – his hero "Doc" Smith had suggested it in *Skylark Three* (1930) and George Bernard Shaw had earlier employed it in the final act of *Back to Methuselah*, but Campbell formulated his own idea of the likely path and pressure of that evolution. The only element of his later obsessions which had yet to be given a foundation within his work was his fascination with "*psi*-powers" – but his displacement from MIT to Duke sent him to the arena of J. B. Rhine's pioneering endeavours in experimental parapsychology, two years before Rhine published *Extra-Sensory Perception*.

Campbell told Sam Moskowitz that his short fiction changed direction sharply after 1932 because he wanted to capture something of the tone of the elegiac opening chapter of a novel called *The Red Gods Call* by C. E. Scoggins. "Twilight" is a quasi-Stapledonian tale which differs from "The Voice of the Void" only in attempting a quasi-lyrical style, which is actually closer to Donald Wandrei's attempts to write pastiches of Clark Ashton Smith than to Scoggins's work. It is also close to the spirit of such British scientific romances as E. M. Forster's "The Machine Stops" and S. Fowler Wright's *The New Gods Lead*, imagining a degenerate future mankind enfeebled by dependence on the bounty of machines.



"Twilight" was rejected by all the sf magazines extant at the beginning of 1933, but it sold to F. Orlin Tremaine, who took over *Astounding* from Harry Bates later that year. It appeared there in 1934 under the pseudonym Don A. Stuart (adapted, of course, from the name of Campbell's wife). Campbell also sold his new space opera, *The Mightiest Machine*, to Tremaine, but Tremaine rejected its sequels and Don A. Stuart became Campbell's principal literary identity. Although he published more action-adventure stories under his own name in *Amazing* and *Thrilling Wonder* the significant further evolution of his work took place under the pseudonym.

By the time he wrote "Night" (1935), in which the machines faithfully maintaining mankind's degenerate descendants have taken up the torch of evolutionary progress exactly as they had in "The Last Evolution," Campbell had written half a dozen other Stuart stories. Two dealt with the theme of atomic power and one with eugenics, but the most significant comprised a trilogy reprinted in the collection *Cloak of Aesir* (1952) as "The Story of the Machine" (1935). Earth is here visited by a sentient machine which takes pseudo-parental control over mankind but subsequently abandons its charges, having realized that its protection is initiating the kind of degeneracy featured in "Twilight." This abandonment leaves mankind at the mercy of more brutal alien masters, but that enslavement turns out to be a blessing in disguise, restoring the selective pressure necessary to reinvigorate the race.

The last foundation-stone was incorporated into Campbell's canon by "Forgetfulness" (1937), a parable in which mankind's star-strewn descendants rediscover Earth but find its cities deserted and their former inhabitants seemingly degenerate. These "last men" have, however, cultivated powers of the mind which have allowed them to transcend their dependency on machines, sidestepping the patterns of "The Last Evolution" and "Night" to take a short cut – or a giant leap – towards their ultimate destiny. This was followed by "Out of Night" (1937), which compounded the two alien invasions of "The Story of the Machine" into one, offering an account of the liberation of mankind from the benign rule of the explicitly maternal Sarn by a symbolic shadow of self-determination.

While he was completing the framework in which his vision of man's place in the cosmos – and the spectrum of evolutionary possibilities

which lay before him – was set, Campbell went through a series of temporary jobs in research and technical writing. He found nothing to suit him until he was offered in September 1937 what must have seemed to him to be the best job imaginable: assistant editor to F. Orlin Tremaine. Within a matter of months, he had inherited the editorial chair; Tremaine left in May 1938, shortly after Campbell had completed the most famous of all the Don A. Stuart stories, "Who Goes There?," whose reputation was assured when it became the basis of the film *The Thing*. Here, the alien invader is unremittingly hostile and supremely dangerous, providing the ultimate challenge – and hence, of course, the ultimate test of human worthiness and capacity for progress.

Several stories which Campbell wrote in the late 1930s remained unpublished for a long time. "Marooned" and "All" were reprinted with the title story in the posthumous collection *The Space Beyond* (1976). Why these stories were not printed at the time remains unclear; it is understandable that his employers might have taken a dim view of his selling stories to competitors, or even to himself, but he did publish "Cloak of Aesir" – a sequel to "Out of Night" – in 1939 and was later to write "The Elder Gods" for *Unknown* when a gap was in urgent need of filling.

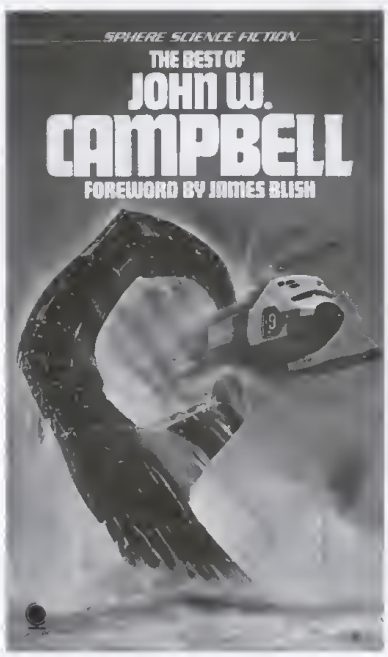
"Marooned" was signed Karl van Campen, and was a sequel to an earlier story written under that name, "The Irrelevant," carrying forward a controversial argument regarding the inviolability of the law of conservation of energy. "The Space Beyond" was yet another space opera involving atomic power. Although both stories seemed remarkably crude by 1976 they would have been perfectly acceptable in 1938. It has also been claimed that the Galaxy Books novel *Empire* (1951) – which carried Clifford Simak's byline although Simak would not include it in lists of his own works – was a revised Campbell space opera left over from the 1930s.

Whatever the reason was, Campbell soon stopped writing and publishing fiction after he became editor of *Astounding*. The remainder of his acknowledged output consists of the short novel *The Moon is Hell*, issued by Fantasy Press in 1951 not long after the same publisher had issued the previously-unpublished sequels to *The Mightiest Machine* as *The Incredible Planet*, and a story written for Raymond Healy's 1954 anthology *9 Tales of Space and Time*. The fate of "All" – a tale in which a future totalitarian state imposed upon the Earth by Chinese conquerors is toppled by ingenious scientists disguised as priests and prophets of a new religion – indicated the manner in which his creative ingenuity would subsequently be employed; he gave it to Robert A. Heinlein and asked him to write it anew (it became *Sixth Column*, aka *The Day After Tomorrow*).

For the next 30 years, Campbell would feed his story ideas to his regular writers, demanding that they develop them. Among many others, he fed "Nightfall" to Isaac Asimov, "The Lion and the Lamb" to Fritz Leiber and "To the Stars" to L. Ron Hubbard; Mack Reynolds has commented that taking on the duty of writing Campbell's stories for him was virtually compulsory in the 1950s and 1960s if the magazine were to serve as one's primary market (as it was for Randall Garrett, Christopher Anvil and James H. Schmitz as well as Reynolds). Campbell also felt free to demand that stories submitted to him be brought into line with his own ideas about their development; he surely ought to be reckoned a collaborator in the conclusions of such stories as Theodore Sturgeon's "Microcosmic God," Tom Godwin's "The Cold Equations," Jack Williamson's "...And Searching Mind," and Mark Clifton and Frank Riley's *They'd Rather be Right*. To judge by the remainder of Frank Herbert's output, Campbell must also deserve a great deal of credit for helping to hammer *Dune* into proper shape.

No other editor has ever taken such an active interest in shaping the work he published. In frank contradiction to the approved methodology of magazine editorship – which held that one should employ seasoned professionals to pander as cleverly as possible to existing tastes – Campbell set out to build a team of new writers and to cultivate a new audience. Within three years of inheriting Tremaine's chair he had formulated that team, including Robert A. Heinlein, Clifford D. Simak, L. Sprague de Camp, A. E. van Vogt, Theodore Sturgeon, Eric Frank Russell and Lester del Rey. When his employers encouraged him to use the seasoned hacks Arthur J. Burks and L. Ron Hubbard he tried as hard as he could to re-educate them – and, in the latter case, succeeded (far too well, alas). When America's entry into World War II depleted his resources he filled the gap by encouraging Henry Kuttner and C. L. Moore to develop new identities, recruited George O. Smith and persuaded Fritz Leiber – a natural fantasist if ever there was one – to turn his hand to serious sf.

Campbell had very definite ideas about what science fiction ought to become, and as soon as he took sole charge of *Astounding* he set out in his editorial writings to persuade the audience to follow him in his crusade. He was eventually to die in the job in 1971, after 33 years of full-time parenthood. His obsession with science fiction was subjected to only one slight divergence, when he founded *Unknown*: a fantasy magazine which permitted his writers to extrapolate – usually in a farcical spirit – premises far more fantastic than those licensed by the scientific world-view. It was fun, and had it endured it might have killed the science-fiction genre by demonstrating, long before the US paperback editions of *The Lord of the Rings* made the fact clear, that modern readers were perfectly happy to read fantasy and that it had a far wider constituency of potential readers than sf. Fortunately for lovers of sf, the war forced a choice to be made in 1942, and Campbell was the man who had to make it; in those circumstances, no other outcome was possible.



Although the science-fiction genre was never entirely submissive to Campbell's image of it, and began to diversify in directions of which he did not approve after 1950, it did so because the best of his rivals gave writers greater freedom than he was prepared to offer; no one else ever successfully adopted the kind of imperious role to which Campbell appointed himself, although feeble echoes of it can be detected in the careers of Don Wollheim and Michael Moorcock. The science-fiction genre grew away from the influence of Campbell's parentage – as all children eventually grow away from the influence of their early environment – to develop all kinds of spontaneous traits, but he was the one man who left his educative stamp indelibly

upon its spectrum and its scope.

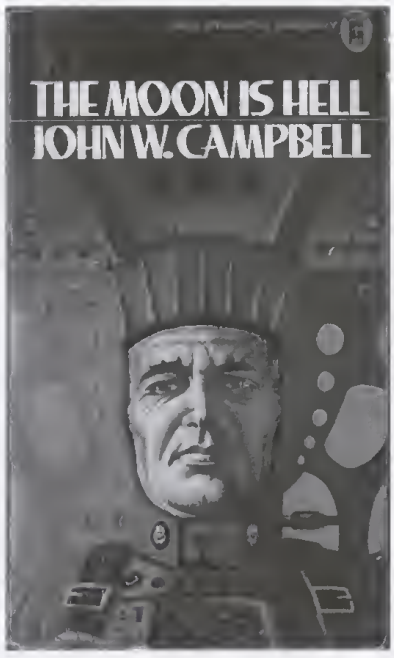
When he was invited to provide a foreword for Groff Conklin's pioneering hardcover anthology *The Best of Science Fiction* (1946) Campbell summarized his notion of what science fiction could and ought to do. He took aboard the Gernsbackian notion that sf could be prophetic – although he took care to insist that all its predictions were hypothetical and contingent – and he freely acknowledged that there was a thriving species of "adventure science fiction, wherein the action and the plot are the main point," but his own emphasis was on the way that hypotheses were developed: "The modern science fiction writer doesn't merely say 'In about ten years we will have atomic weapons.' He goes further: his primary interest is in what those weapons will do to political, economic and cultural structures of society." (4)

This was the heart of the Campbellian enterprise: science fiction was, for him, a kind of "analytical laboratory" which ought to be as scrupulous as possible in trying to anticipate the myriad ways in which technological development would permit, encourage and force social change. In the process, he pointed out in that same foreword, sf stories could not help but touch on deep philosophical questions regarding man's place in nature and his role in cosmic history. He had already worked out what the core questions were, and although he would henceforth address them obliquely, he never lost sight of them. There is a sense in which the entirety of Campbellian science fiction can be seen as a series of footnotes to "The Last Evolution" and "Forgetfulness."

It is easy enough, looking back at the history of magazine science fiction from 1938 to 1970, to conclude that its central theme was the conquest of space. Don Wollheim – another man who devoted his life to science fiction – observed in *The Universe Makers* (1971) that there had emerged within the genre a broad consensus regarding the likely future shape of human history, whose significant benchmarks extended from the first moon landings to the birth, growth and eventual decline of a galactic empire. It is, indeed, the case that the galactic empire became such a convenient framework for planetary and interplanetary romances – ranging from gaudily exotic adventure stories to extraordinarily elaborate *contes philosophiques* – that hundreds of writers were happy to take it for granted (thus establishing Isaac Asimov's pioneering Foundation series as the core project of Campbell's revamped *Astounding Science Fiction* and of the genre) but that future history, and its attendant myth of conquest, was always a means rather than an end. The *fundamental* question which Campbell bequeathed to the genre he adopted was whether mankind's relationship with technology was fated to lead him into terminal decadence.

Campbell concluded, almost as soon as he first set pen to paper, that there was a very strong likelihood that mankind would one day be superseded by intelligent machines, whose remotest ancestors were the electric "integraphs" employed at MIT in the late 1920s. He was prepared to wonder whether that would be any bad thing, if the machines themselves were to evolve, in the end, into godlike entities of "pure force" – but he was also prepared to wonder whether there might be a way of cutting out the middle man, so that mankind might find a more direct route to quasi-godhood. That seemed to him to be the preferable alternative, but he was prepared to give dispassionate consideration to any means that might hasten the ultimate end.

Campbell's attitude to alien beings was, from the very beginning, deeply ambivalent; whereas most of his contemporaries were avid to befriend the nice aliens and annihilate the nasty ones, Campbell wondered whether the ones which sought to enslave or destroy us might actually be far more use to us in the long run than those which were sincerely benign. In Campbell's view, mankind could not possibly hope to win the great game of evolutionary progress without honing his skills against top-class opposition. Some have called this "human chauvinism," and a few have thought it incipiently fascist, but Campbell – whose idea of the big picture had been formulated in "The Voice of the Void" and "The Last Evolution" – always thought that his opponents were too narrow-minded.



We can now see, of course, that the fundamental nexus of Campbellian ideas is seriously misguided, if not downright silly. Even if the idea of sentient creatures of "pure force" retains some faint shadow of credibility, the idea that mankind might – under the right evolutionary spur – enjoy an evolutionary leap to a magically-sustained post-technological society is patently ridiculous. The fact that we can no longer maintain any serious belief in the galactic empire is merely corollary to these deeper absurdities.

The termites of reason have, by now, eaten out the entire structure of ideas supporting the house of Campbellian sf – but that does not necessarily make his quest any less heroic, or his achievements any less titanic. The one enduring legacy of his work which has not lost its value, and never will, is his insistence – embodied in the colophon of *Analog* – that the methodology of science fiction is analogous to the methodology of science, employing rational extrapolation to establish thought-experiments as thoroughly and as cleverly worked out as the writer can contrive.

To do that properly, of course, requires the kind of tight focus and obsessive analysis that Asperger's Syndrome produces – but only those unlucky enough not to be possessed of that precious gift are likely to be resentful of the fact. Some lovers of the genre may regret that science-fiction fans have acquired a reputation and an image which link them irredeemably to train-spotters and computer nerds, but there is no doubt at all that out of all the literary genres available, science fiction – and Campbellian "hard" science fiction most of all – is the one which is most closely adapted to the needs and skills of dedicated engineers and their precocious children.

NOTES AND REFERENCES

(1) A more elaborate treatment of this argument can be found in Greg Egan's *Distress*, which offers a sympathetic account of the philosophy of "Voluntary Autism."

(2) Moskowitz, Sam, *Seekers of Tomorrow*, New York: Ballantine, 1967, p.37.

(3) Campbell, John W., Jr, "The Last Evolution" in *The Best of John W. Compbell* ed. Lester del Rey, New York: Ballantine, 1976, p.19.

(4) Campbell, John W., Jr, "Concerning Science Fiction" in *The Best of Science Fiction* ed. Groff Conklin, New York; Crown, 1946, p.vii.



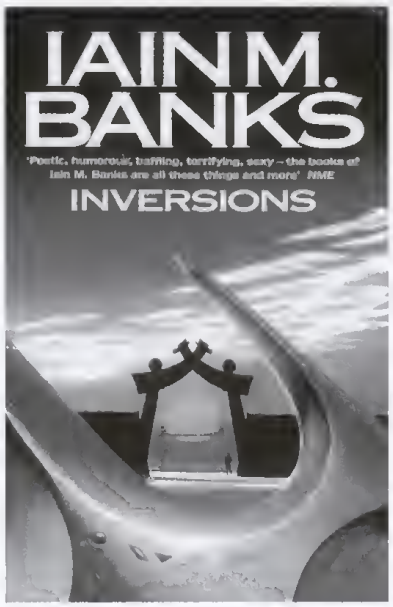
Trope Shoot

Paul J. McAuley

Iain Banks famously has two careers distinguished by the presence or absence of his middle initial. There's Iain Banks, radical mainstream novelist, gadfly of the literary establishment, author of *The Wasp Factory*, *The Crow Road* and *Complicity*. And there's Iain M. Banks, author of wide-screen baroque space operas, the most notable of which deal with the Culture, a socialist utopia run by machines for the accidental benefit of humans, which take gleeful swipes at the conventions of traditional (that is, American, libertarian, militaristic) space opera.

Both Iain Banks and Iain M. Banks now routinely top the best-seller lists, and their latest books seem to confirm the old adage that everything that rises must converge. Iain Banks's last novel, *A Song of Stone*, was a tough-minded fable set in an unnamed country riven by civil war. A mercenary lieutenant takes over the castle owned by the novel's narrator and exposes the hollowness of the self-justifying moral code with which he has excused his selfish and exploitative life. Iain M. Banks's latest novel, ***Inversions*** (Little Brown, £16.99) is an alien invasion story in which interlopers in courts and castles shine their knowledgeable gaze in awkward corners.

The invaders, not quite recognized as such by the hapless invaded, but certainly under suspicion, have for different but linked reasons penetrated the governing circles of two countries on an alien world whose technology is roughly that of the 16th century. As in many of Banks's texts, the double-stranded story is a study in misdirection, told by narrators who know less than they reveal. One part is the story of the bodyguard of the Protector of Tassesen as told by a member of the Protector's court; the other is the story of a mysterious woman, Dr Vosill, physician to accident-prone King Quience, as told by her assistant. Each is a series of unmaskings, told from both sides of a war that threatens to engulf the neighbouring nation states, fragments of an Empire which collapsed after fire and rocks fell from the sky. Gradually, we realize that both the bodyguard and Dr Vosill are from a more advanced civilization, and that the plot is in part an illustration of their disagreement about the way in which less advanced worlds should be guided (and here we must wonder about what caused the falling fire and rocks; although we are left to draw our own conclusions, it's crucial to understanding the motivations of the interlopers). And we also realize that Dr Vosill's assistant (who is also a spy for one of the King's courtiers) and the teller of the bodyguard's tale have their own secret motivations.



It is a brilliantly sustained piece of double ventriloquism, tough-minded and told in a spare and deceptively simple style reminiscent of Robert Louis Stevenson's classic adventure stories. Apart from a single crucial incident, there is no recourse to the magic of high technology. Like *A Song of Stone*, *Inversions* is a complex and carefully structured morality play that aspires to the universality of a fable. The single drawback (if it is one) is that *Inversions* is most fully enjoyed if you have some prior knowledge of the Culture, but even so this sinuous fusion of character-driven plot with science-fictional estrangement is a masterful and mature accomplishment.

Robert Silverberg's ***The Alien Years*** (Voyager, £16.99) is about a more conventional alien invasion, that of technologically superior aliens conquering the Earth. Silverberg's wry treatment eschews the flashbangs and clenched-jaw seat-of-the-pants heroics of such dumbed-down epics as *Independence Day* for a more subtle approach, in which 50 years of alien rule is shown from the distancing point of view of an American family involved in an impotent resistance movement. In doing so, it finds a new angle on an sf trope so old it should by now be worn smooth as a pebble, while slyly sending up the clichés of its predecessors.

One day early in the next century a variety of alien spaceships land in various of Earth's big cities. The one which lands in Los Angeles touches off a dangerous series of brush fires (by accident, the aliens later claim – not for them the usual destruction of tourist landmarks). While helping fight the fires, Mike Carmichael, a pilot and Vietnam veteran, learns that his young wife, Cindy, has been taken into the alien's spacecraft. Mike is a likely hero for any thundering epic, and it's a signifier of the author's intent that he dies the same day in an aircrash. Meanwhile, Cindy (a nicely realized kook dangerously possessed of complete self-belief, who might have stepped out of the pages of a Philip K Dick novel) finds that the aliens, things like 15-foot-high purple squids, are capable of reading human minds, and believes that she will leave with them as an ambassador for humanity.

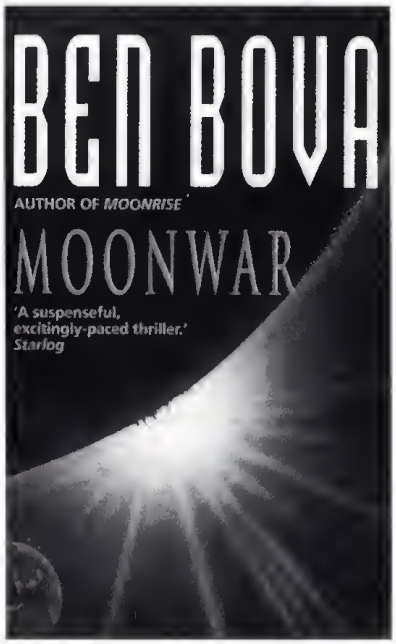
No such thing happens. Instead, the aliens settle down to rule the Earth with an absent-minded but completely effective tyranny. Feeble attempts to destroy them provoke swift and cruel responses: everything dependent on electricity stops working for a while; a plague kills half of humanity. The survivors settle under

the alien yoke, either actively collaborating or being forced to work on the aliens' building projects by their telepathic "push," but there is still some resistance, including that of the Carmichael family, who, led by Mike's patriarchal elder brother, Aaron, retreat to the family farm outside Santa Barbara.

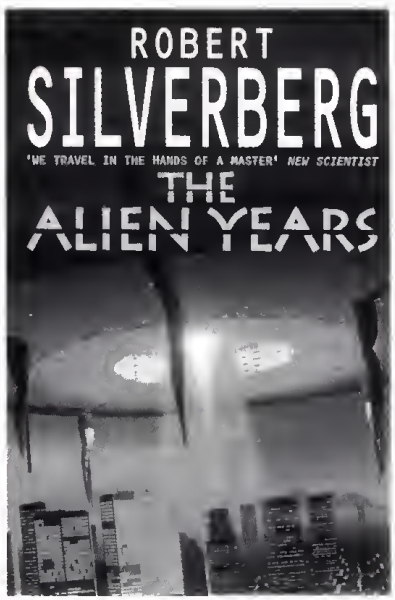
The novel's focus is not the aliens, who are mostly unfathomable, a disaster as capricious as a forest fire (reminding one of the unseen aliens who casually destroy humanity in Tom Disch's *The Genocides*), but the history of a family living through the end of history, in which individual heroics are less important than the collective will. It's a ruminative work whose low-key approach may disappoint those looking for the traditional science-fictional affirmation of humanity's unique grit in the face of impossible odds. It does have its longueurs, and there's a thinness to some of the narrative threads (most notably the story of a collaborator who ends up ruling the world by default, and who is rather casually dispatched), yet the sweep of the story is undeniably grand, and Silverberg presides over it with an ironic, semi-detached intelligence and a sure, relaxed touch.

Ben Bova has a more conventional approach to history – it definitely hinges on the actions of the privileged individual, preferably someone young and very rich and (of course) American. In Bova's *Moonrise* it was Paul Stavenger, who died defending the moonbase he had fought to establish for the corporation. In the sequel, ***Moonwar*** (Avon, $23), it's Doug Stavenger, son of Paul, who is not only rich but also a kind of superman, thanks to the nanotechnology with which he is infested. Just as well, as he must face the might of the United Nations, which wants to shut down the moonbase, ostensibly because of the base's use of nanotechnology, in fact because, in collusion with the corporation's Japanese rivals, the UN's villainous General Secretary wants to appropriate the nanotechnology for his own gain.

Given the current dwindling of real hard sf, one wants to like a novel which scruples to take seriously the problems of establishing a viable colony on the Moon. But while the details of daily Lunar life are described with some skill, the story is a dull farrago of badly thought-out clichés populated by two-dimensional characters. For reasons never explained, the UN is a nuclear power able to bully even the US government; although the moonbase itself is admirably multi-ethnic, most of the villains are vile foreigners with appalling personal habits; the billion-dollar company of which Doug is chief executive is run by making *ad hoc* decisions. And so on. One is left with the feeling that Bova cheerfully made it up as he went along. Fortunately, while it's still possible to get a badly written hard-sf novel published, it is as yet not necessary to read it.



Sean McMullen's ***The Centurion's Empire*** (Tor, $24.95) takes another hoary sf theme, time travel, shakes it by the scruff of the neck, and wrenches it into an interesting new shape. McMullen's version of a time-travel machine is built, cleverly and plausibly, using technology available at the height of the Roman Empire (albeit with an excusable bit of hand-waving biochemistry), the nucleus of a solid, well-crafted story that cleverly reverses the stock plot of travellers from the future amazing the benighted inhabitants of the past.



After surviving a shipwreck in freezing waters, Vitellan attracts the attention of the Temporians, who maintain a secret grip on the Empire by using hibernation techniques which allow them to extend their lifetimes by several hundred years. Vitellan is recruited into the legion which defends their keep, but is unable to prevent thieves stealing the potion necessary for to survive freezing. After much plot and counterplot, Vitellan, now a senior official in Britain, obtains the last of the necessary potion and decides to undergo a long sleep after an unsuccessful love affair.

His sleep lasts longer than he planned; a secret cabal grows around the protection of his frozen body. He's revived in 870 AD in time to help the young King Alfred fight the Danes, and again in the 14th century, where, despite being stricken by side-effects of the potion, he defends noblemen against the rabble of the Jacquerie. After a renegade priest, the leader of the Jacquerie, takes most of the potion for his own use, Vitellan elects to be frozen again, and is revived in 2028 in a body not his own, in a world torn apart by a religious movement headed by the renegade priest, who was revived a few years earlier. Helped by a professional assassin, Vitellan must come to terms with the strange new world in which he finds himself and unravel the plots within the vast and wealthy organization the cabal has become.

The story is fast-moving and complex, packed with revelations, reversals and surprises – perhaps too many, given that some are closed loops which add only baroque twiddles to an already overloaded plot in which there's little room for development of Vitellan's suitably heroic but rather bloodless character. In this, it is classic sf, filled with strange yet plausible machines and ideas (and McMullen is as ingenious here as in his post-apocalypse *Greatwinter* trilogy), in which practical application of logic and knowledge allow the hero to triumph in a cleverly contrived plot. *The Centurion's Empire*'s virtues may be old-fashioned, but it is entertainment of the highest order.

Science fiction is engaged in a continual dialogue with itself. That's why writers who deploy well-worked science-fictional themes without bothering to read much sf often end up thrashing out stale clichés without realizing it. I do not know if Lise Leroux has read much if any sf, but her debut novel, ***One Hand Clapping*** (Viking, £9.99) manages to expand that perennial science-fictional idea, growing body parts for replacement surgery, into a fresh, vivid and original story.

It's the future, much like the present but dingier, impoverished, and

with better gadgets. Jobs are hard to find; some, like the labour of cleaning human debris from the rails of London's failing Underground system, are passed on from father to son and mother to daughter. Marina is an exiled member of one of these clans. Bereft of love and disgusted by a series of empty one-night stands, searching for the comforts of affection rather than sex, she signs up as a recipient of bud grafts of human organs at the clinic of the sinister Dr Hurtigger. She becomes emotionally bonded to one of the hands which grows on her body, and after it is removed she begins to search for it. Passed from character to character like a ronde, the complex tale of Marina's family is unfolded, and the true extent of Dr Hurtigger's crimes are slowly revealed.

It is a fable whose science should be taken as a metaphor rather than an extrapolation. You don't believe for a moment in the plausibility of the transplant technology, which borrows from the techniques and terms used in grafting plants, but it has its own internal logic in which the fear of the otherness of the body is skilfully conveyed. The wilful grafts are more like children than simple body parts; as the first hand unbuds, Marina finds that "her skin split like an out-of-control episiotomy"; a woman absorbs her husband into her body, and is horrified when he tries to erupt through her; the walls of an Underground tunnel are covered with "a patina of seemingly living, breathing new skin." By turns playful and horrific, crammed with wit and invention, it's an admirable debut.



Sean McMullen, author of *The Centurion's Empire*

Photo: Paul Brazier

Also noted: It's possible to think of science fiction as the Tarot Fool, carrying a bundle of tropes over one shoulder, standing at the edge of a cliff and snatching at some beautiful notion which flutters just out of reach while the hound of plausibility snaps at its heels, trying to prevent its headlong fall. For a genre in which informed extrapolation is an important component of its *zeitgeist*, books like John D. Barrow's ***Impossibility: The Limits of Science and the Science of Limits*** (Oxford University Press, £18.99) usefully defines the dangerous edge where the possible gains that all-important prefix. Barrow, Professor of Astronomy at Sussex University, is co-author of one of radical hard science fiction's essential points of reference, *The Anthropic Cosmological Principle*, and a number of other fine books which map the boundaries of science. His allusions to the genre may hark back to the Golden Age (perhaps because that's where the genre defined the territory it's been mapping with increasingly microscopic fidelity every since), but his disquisitions on the boundaries of physics, biology, mathematics, the definition of humanity, and much more, are lucid, insightful and bang up-to-date – good jumping points for holy fools.

Paul J. McAuley

Three Fairly New Writers – and John Barnes

Chris Gilmore

I've remarked before that most new ideas are bad ideas, and here comes Michael Kanaly with ***Virus Clans*** (Ace, $12) to prove that they're no better for being mixed with old ones.

Kanaly's astrophysics are those of Doc Smith, and he too uses Svante Arrhenius's discredited "spores of life" theory. His new idea is that all Earthly evolution for the last three billion years has been directed by viruses for their own ends. As an individual virus is a bit small to encompass a teleology, he posits that they have a world-spanning collective consciousness analogous to a hive of social insects. That implies action at a distance (or perhaps a field of morphic resonance) – bad science either way, but I could shrug it off were it redeemed by good writing. It isn't. To emphasize the cosmicness of the whole shooting-match, Kanaly spews page upon turgid page of sentences without main verbs (although some of them sport subordinate verbs), as he snapshots the stages which culminate in our good selves. The effect is like an unkind parody of the early chapters of *2001*, but by way of relief we have scenes from the lives of the research scientists who uncover the Great Secret, and who love nothing better than to explain elementary molecular biology to each other lest the reader get out of his depth. Kanaly is well aware that he's perpetrating "Ron & Don" conversation, and proffers something not unlike an apology for it, but the best apology would have been to junk the MS.

The characters are a wooden lot, the more so for being presented as sensitive souls. This is the reaction of Mary Ann, the research assistant, when a colleague refers to another (not present) as "Dr Frankenstein":

> "That's not very funny." Mary Ann shook her head, following Eez downstairs to the cafeteria, wondering if this sort of warped humour was the norm in all experimental labs.

It's about all we hear of her, incidentally; Kanaly's characters collapse into total incoherence after 200 pages, beating his plot by a short head. His general knowledge and command of English are on a par with his characterization and development. He appears to believe that the plural of shaman is "shamen" and that an archeologist would subsume skeletal remains under artefacts. He equates the 13th century with the 1300s, and if his use of the word is any guide, he defines watershed the way the rest of us define aquifer. As Jennings almost said, you keep firewood in a woodshed, so you keep firewater–

To represent the next stage of human evolution may well be impossible by definition, but it's a serious enough project for Olaf Stapledon to have sweated blood over it. Kanaly takes it on as well, and comes up with an answer: the post-human people of a thousand years hence are *just like us* – only not so bright. His editor – but I'm tired of berating editors. Ace has paid good money for and released in handsome B-format something the better sort of vanity publisher would have sent back, and I've literally no idea why. Away with it!

The lit. crit. approach to The Novel places "truth to life" second only to a decent prose style, so that if the characters are monolithic, hackneyed or psychologically inconsistent, if their emotional reactions are exaggerated not merely past reason but past the hither shores of unreason, or (for the Marxists) if they fail to react appropriately to their phase in the Class Struggle, the work will be pigeon-holed as trivial, decadent or

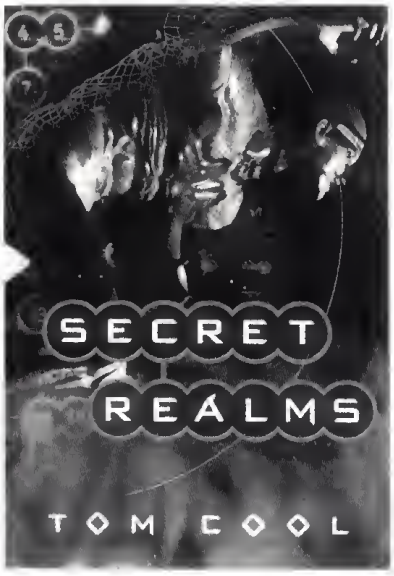
vulgar. That leaves cyber/splatterpunk rather on a limb, as it's a convention of this sort of writing that just about everyone is barking mad most of the time through reckless misuse of stimulants and psychotropics, immersion in VR, injudicious mental and physical augmentation, ill thought-out genetic modification, prolonged sensory overload, various combinations of the above and such minor developmental misfortunes as childhood sexual/physical abuse, partial or total mnemonic erasure, religious mania and comprehensive betrayal.

Lucifer's Dragon by Jon Courtenay Grimwood (NEL, £6.99, B-format) is typical of the genre but, because it borrows the structure of Poul Anderson's *The Stars Are also Fire* (reviewed in *Interzone* 110), even less approachable than most. It's written on two levels, the primary being set somewhat over a century hence in the artificial island state of newVenice (*sic*), where the child-Doge has been kidnapped and Razz, his female bodyguard, killed. Razz's psyche is promptly downloaded into the body of a virginal clone of herself, and with commendable devotion to duty goes in search of her charge. Meanwhile Karo, spoiled sprig of the newVenetian aristocracy, is raising Cain in the favelas that surround the island, and Angeli, a tough but junior detective, is delving into the sexual, financial and political violence that attended the foundation of newVenice, being convinced (for no obvious reason) that there lies the clue to the murder/kidnapping. His perceptions of what happened then, counterpointed with what actually did, constitute level 2.

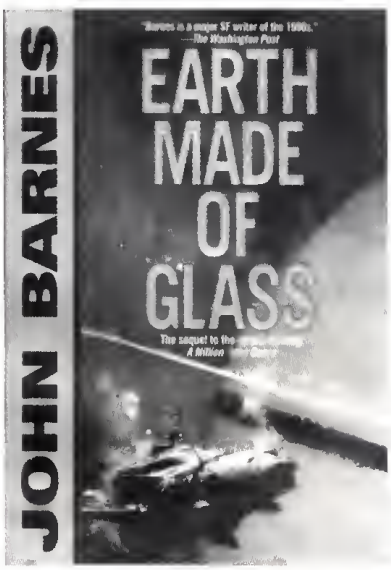
The tone of the whole thing is exemplified by the following, where Razz is about to lose her second virginity under conditions that partake of prostitution and aggravated rape, such being par for a sexual relationship – at least in Zurich; doubtless manners are more polished in Albuquerque, Brazzaville, Calcutta...:

> "Like the teeth," Razz said sweetly. It took every effort to sneer with both hands epoxied to the floor of an APV/H and a naked, anally-retentive West Coast psycho crouched over you, but Razz managed it anyway.

I sympathize – anally-retentive psycho New Englanders display so much more finesse – but why should I care which corrupt clique controls newVenice? Moreover, the book shows signs of hasty construction in conception and in detail. It's bad enough when a character's eyes change from blue to green on a single page; a lot worse when Grimwood, finding Razz surplus to requirements, leaves her hanging in mid air while he (very improbably) pairs off Karo and Angeli; worst of all when he tries to justify that by retrospectively falsifying her ontological status. (In fact he inserts an intimation into an early chapter, and I had it tagged as needing an explanation, but it's got all the mark of an afterthought.)



The trouble is, the story isn't really about anything or anyone – just a perfunctory display-case for the blood-'n'-guts. The protocol whereby one Doge succeeds another, for instance, is among the silliest ideas I've ever encountered. I can see no reason why anyone should want to institute it, or anyone else want to sustain it – but even so, I'm game. Give me a good enough tall story and I'll suspend disbelief. Grimwood offers no story at all, just introduces it as a plot mechanism and passes on, and the whole book is like that. His descriptive passages are entertaining in a gruesome sort of way, but I found it impossible to sympathize with either the intentions or the misfortunes of his characters. Various crazies lay, flay and betray each other (with lots more "smiling sweetly," for which read mockingly and/or condescendingly most of the time), walk-ons and foot-soldiers get creamed wholesale, but so what? I suppose I could go all moral about "the pornography of violence," but I'm truly more concerned with Grimwood's narrative style. Expressions like "Razz'd" (= Razz had) look clumsy on the page and sound clumsy on the inner ear. His editor – Ah, forget it! It is, alas, all too venial a fault by current standards.



I think the idea of children reared from birth in a world of VR battles so as to become lethal controllers in a computer-led war in the real world (of which they are totally ignorant) originated with Orson Scott Card, but Tom Cool has taken it up in ***Secret Realms*** (Tor, $22.95) to very good effect. The story is told mainly from the viewpoint of Trickster, one of the more adept of the 15 survivors of the experiment (one went mad and was put down, two consist of the dissociated hemispheres of a single individual), all of whose characters are economically but effectively drawn against the background of their training. That has consisted of a recapitulation of the entire history and mythology of human warfare up to the near future of the outside world, where the 15 are to be deployed by China in a showdown with Japan, the other superpower – the US having by now dropped to the status of important second-division player.

They are motivated by an ingenious system, whereby success is rewarded with the opportunity to furnish the virtual worlds where they relax when off duty with baroquely satisfying constructs and to devour the finest virtual cuisine, while failure condemns them to an impoverished environment and Vegan fare – or at worst a blue-screen backdrop and a diet of grubs and bark.

But the interest, and the suspense, lie not in the forthcoming war but in our concern for Trickster and his colleagues. They are now young adults, but what will be the condition of their bodies after 17 years cut off from the physical world? How will the necessarily non-sexual love which has arisen between some of them translate in the physical world? What plans have the Chinese authorities for them, once they have won their final victory – if they do win? And will they? Have the Japanese a similar counter-program?

The contrast with Grimwood's book is worth noting here, because although both address the possible effects of advances in computer technology and VR on human conflict, Cool doesn't allow them to swamp the traditional and legitimate concerns of the novelist, which have to do with the interaction between psychological imperatives under social pressure



against a background which may include rapidly and disquietingly changing political, economic and technical factors. And I wonder how many of the great novelists of the last century could have made head or tail of that sentence! But that was what they did, that's what Cool does, and the Great Tradition rolls on – at least until about halfway through the book, when Trickster discovers the truth of their situation.

After that many of the above questions are answered in rather facile ways so as to clear the decks for the all-action, blood-'n'-guts war thriller that makes up the second half – much more conventional than the first half, and less to my taste, but well enough done for those who like that sort of thing. Cool addresses the moral questions arising from military sacrifice effectively enough but, unsurprisingly, comes up with nothing new. He also attempts to represent the feelings of a man passing out of life into whatever lies beyond – something that many have tried, but which I have never found entirely convincing. Even so, this is an ambitious work which succeeds more often than not. I look forward to Cool's next.

One of the major assumptions of the old science-fiction monomyth described by Gary Westfahl is that the moment interstellar colonization becomes practicable shiploads of separatists will space out to establish "purified" racial, cultural or religious communities on new worlds, free from contamination by the deracinated, anglophone, capitalist, technophile, miscegenated, pagan/agnostic mongrel that has given rise to such abominations as (for instance) *Interzone*. In ***Earth Made of Glass*** (Tor, $25.95) John Barnes returns to that idea, with a question: What happens when two such cultures, which would have been mutually antagonistic even were they not obsessed with their own purity, are forced by circumstances to live together in a small area on an otherwise uninhabitable world? This sort of thing has been done before, most notably by Ursula Le Guin (*The Left Hand of Darkness* and *The Dispossessed*) and Mack Reynolds (*The Rival Rigellians*), but it's worth doing again, especially as Barnes does it so well.

To spice the mix further, he makes both the alleged Tamil and the alleged Maya "reconstructed" cultures of very doubtful authenticity, and sensitive about it. Even much of what both would allow to be genuine is bogus, as Barnes makes clear: the Tamils lay claim to *The Dream of the Red Room* for their literary canon, and I suspect that similar jokes at the expense of the Maya have gone past me.

The story is told from the viewpoint of Giraut Leones, who is sent with his wife Margaret to the world of Briand to observe what is going on between Tamil and the Maya, and if possible suggest a plausible path to a happy outcome. They are not expected to succeed, but one must *try*. To add to his angst and her irritability, their marriage is on the rocks for a reason Giraut can do nothing about. He himself was a handsome man when young and has retained much of it into middle age, while Margaret, whom he married for love, was never attractive and is morosely aware that she has not aged well. She has taken to giving him a hard time on account of his presumed yen for younger, prettier women and rejecting his genuinely affectionate overtures as hypocritical attempts to disguise/assuage his guilt therefor. Their relationship has if anything less chance of a happy outcome than that of Tamil and Maya.

It's an unusual relationship, which Barnes explores with zest, for despite the drama inherent in a world sliding into a war of mutual extermination, this is very much a character-driven novel. The plot advances slowly, with much talk and little action, but is no less gripping for that as it allows plenty of time for the interplay of character and ideas between representatives of the Tamil and Maya intellectual classes, Giraut and his wife. All the people mentioned make sense in terms of their roots, which (as usual) makes the action more credible once it erupts.

Barnes's descriptive passages are ingenious and convincing as well, but the same can't be said for his ornamentation. He has taken up another old idea, the blend of many romance tongues which has become the mother tongue of Giraut's home world, and gives us examples. The effect, as always, is of a language consisting entirely of howlers perpetrated in other languages, and it grates horribly against Barnes's prose, which otherwise runs from acceptable to excellent. The phrase "sapere-facire", for instance, looks like someone's attempt to translate savoir-faire into Latin, except that would be sapire-facere. There's no excuse for this sort of thing; linguistic evolution has little momentum and no teleology, which means that no one's vision will convince anyone else – or so I maintain, and if you feel like taking that as a challenge, be my guest.

The development is a trifle contrived, and based on an idea familiar from Roger Zelazny's *Lord of Light*, where bogus Buddhism gave rise to a genuine Buddha. Here a tradition of bogus prophecy spawns a genuine prophet, for the pragmatic reason that he's the best man for the job – and we all know what happens to prophets. Finally, I should mention that this is a sequel to *A Million Open Doors*, reviewed by Paul McAuley in *Interzone* 67. The purist may want to read that first, though this book stands very well on its own.

Chris Gilmore

Traces of a Lost Genre

Brian Stableford

One can usually obtain a better overview of a writer's predilections and preoccupations from a retrospective collection of miscellaneous short fiction than one can from consideration of his latest novel in the context of its immediate predecessors. ***Traces*** (HarperCollins, £16.99) is not Stephen Baxter's first collection but the stories in *Vacuum Diagrams* were all part of the Xeelee sequence, and are thus distributed over a narrower spectrum of concerns. The stories in *Traces* extend from the author's second professional sale, "Something for Nothing" (1988), to "In the MSOB" (1996), a slightly expanded version of which was adapted into a chapter of the author's latest novel, *Titan* (1997). One story – "Moon Six" (1997) has a later publication date than "In the MSOB" but may not have been written subsequently, and is in any case part of the same literary constellation.

There are, of course, certain features of a writer's work which do not show up in a short-story collection because they can only be manifest in longer works. The items in *Traces* cannot display what is arguably Baxter's greatest strength as a writer of hard sf: the meticulousness of his research and his awesome capacity for constructing and describing – in convincing detail – imaginary environments. The worlds within short texts are, by necessity, mere thumbnail sketches; even the longest story here – 38 pages – gains no advantage from its length because it contains a whole series of imaginary worlds.

The greatest literary virtue which is clearly manifest throughout this collection is a beautifully economical

plainness of speech: a kind of simplicity which is far from easy to contrive. Baxter's most obvious predecessor, Arthur C. Clarke, once had the same ability, and so did Bob Shaw at his best, but its most effective practitioner has been Ray Bradbury, who demonstrated even more clearly than Clarke that lyricism and stylistic simplicity are by no means incompatible. Baxter has something of Bradbury's lyrical quality as well as Clarke's much sterner regard for scientific accuracy, although he is wisely restrained in his application of the sickly nostalgia with which Bradbury so often buried his lyricism. Only "Weep for the Moon" (1992), in which a forewarned Glenn Miller refuses to get off the plane which will carry him to his death, really reads like a Bradbury story, although "Good News" (1994), in which Superman accepts Pilatesque judgment and becomes a new Christ, and "In the MSOB" are a little that way inclined.

Most of the earliest stories to be found here are set in classic Campbellian moulds. "Something for Nothing" is a problem story in which three spacefarers happen upon an enigmatic wreck and apply its advanced technology to a minor difficulty of their own. In "The Droplet" (1989) – whose scientific basis anticipates Gregory Benford's *Cosm* – a scientist finds metaphorically-appropriate compensation in his work for irremediable disappointments in his personal life. "The Jonah Man" (1991) is a tale of cold equations in which three spaceship-wrecked men must replenish the supplies of a lifeboat built for two in a highly exotic environment. "Traces" (1991) applies a method of recovering particle memories to cometary dust, thus revealing a little of the history of the star whose supernoval explosion gave rise to the heavy elements in our own solar system; according to the author's afterword its resemblance to Clarke's classic "The Star" is due to imaginative resonance rather than conscious copying, but is revealing nevertheless. "George and the Comet" (1991) is another popularization-of-science vignette, although it takes advantage of post-Campbellian laxity to make a slyly casual and entirely arbitrary narrative move to provide its far-future imagery with a convenient literary viewpoint. "In the Manner of Trees" (1992) is stamped from yet another classical template: the ecological puzzle story.

Baxter's most significant early diversion from the Campbell/Clarke hard sf highway was "Journey to the King Planet" (1990), which the author describes as a "proto-steampunk romp" although it is, in fact, a conscientiously Vernian romance with no punkish element at all. It introduced the ideative device which became central to the novel *Anti-Ice* (1993) and a backward-looking literary method that was further extended in the related stories "No Longer Touch the Earth" and "Mittelwelt" (both 1993), set in alternative histories in which Aristotle was right about the nature of the cosmos and the Germans were victorious in World War I. Both are tales of flight which make much of the allegedly-glorious experience of gravitic defiance – as does "Brigantia's Angels" (1995), an alternative history in which the dreams of a forgotten Welsh pioneer bear fruit. "Darkness" (1995) offers an ingenious and highly ironic hypothesis as to the possible origin of the imagery in Byron's famous poem. "Columbiad" (1996) is an explicit sequel to Verne's *From the Earth to the Moon* and *Around the Moon* in much the same vein as his brilliant Wellsian romances *The Time Ships* (1995) and "The Ant-Men of Tibet" (*Interzone* no. 95, May 1995).

Baxter's afterword calls attention to a second substrand of his work which owes some inspiration to James Blish's classic "Surface Tension": a substrand which takes in his first novel, *Raft* (1991) as well as three stories included here: "Inherit the Earth" (1992), "Downstream" (1993) and "The Blood of Angels" (1994). All deal with the attempts of humans stranded in highly exotic and challenging environments to sustain some semblance of culture and society. It is notable, however, that if one compares the novel and the three short stories they suggest a dramatic chronological shift in attitude. *Raft* is a thoroughly Campbellian account of heroic triumph over extreme adversity. "Inherit the Earth" is similarly heroic but introduces a note of farcical satire. "Downstream" leaves far less scope for actual heroic achievement but compensates with soberly uplifting revelation. "The Blood of Angels" allows a blackly pessimistic Darwinian logic to unfold with telling cynicism – the same cynicism that was to be introduced to a very similar set of metaphorical images in "Brigantia's Angels" and was eventually to form the whole ideological substratum of *Titan*.



The author's afterword also identifies "Pilgrim 7" (1993) as a key work in his canon, by virtue of being his first alternative history of the space programme. Here, the Cuban missile crisis turns sour, its apocalyptic aftermath witnessed by a hapless astronaut orbiting the Earth. This was indeed to be a key story, not simply because it planted the seed of other alternative space programme stories like "Zemlya" (1996), "Moon Six" (1997) and the magisterial *Voyage* (1996) but because it established the ideological ground on which those stories would operate: the opposition of wonderful dreams of flight (of which those displayed in "No Longer Touch the Earth" and "Brigantia's Angels" are mere back-extrapolations) to the earthbound mire of vulgar political ambition, whose tendency is towards oppression and all-out war. In *Titan* this opposition becomes even more extreme, both literally (in its account of early 21st-century world politics) and metaphorically (in its account of the bogging down of NASA's last heroic fling in the glutinous "tholin" of Saturn's moon. Although "Moon Six" actually maps out the phases of Baxter's retreat from optimism to blackly comic pessimism, the historical revisionism of "Zemlya" might be reckoned the neater analysis of the tragic intersection of vaulting ambition and political pragmatism.

It is by virtue of Stephen Baxter's ability and determination to speak plainly, and to lay matters out with deftly elegant simplicity, that he embodies more clearly than anyone else the plight of the contemporary science-fiction writer – and perhaps, if the worst-case scenario needs to be taken seriously, the plight of contemporary science. The one science-fictional motif which is conspicuous by its absence from this collection is any image of future human society. A handful of spacefarers tackle problems in environments very far removed from the here-and-now. A few exotic viewpoint characters obtain fascinating glimpses of the very remote past or the very remote future – worlds in which the fate of our humankind is quite irrelevant. (Baxter's Xeelee sequence, which combines space opera and visionary fantasy in a currently-fashionable manner, takes both of these tendencies to an uncomfortable extreme in *Ring*, 1994.) The rest of the stories

here – accounting for slightly over half the number and considerably more than half the wordage – are tales of what might have been.

This is, in sum, where science fiction has now arrived. Space opera lives on as a kind of futuristic fantasy: costume drama with knobs on, where logic is a handy lever to move carefully-rigged plots. Visionary fantasies celebrating the wonderful revelations of science live on too, although the difficulty of embedding them in humanly-interesting plots is as awkward as it ever was. The rest is just a catalogue of bitter and ironic might-have-beens. The future of human society has become all-but-invisible, obscured by the political blindness which cannot see far enough beyond immediate individual and national advantage to leave us with a cat in hell's chance of surviving the nascent ecocatastrophe which will provide the backcloth to the next and last world war.

There is, of course, still a chance that human society will actually have a perfectly tolerable future – but while nobody can quite believe it, there can be no future in, and perhaps for, serious speculative fiction.

Brian Stableford

Underplaying the Apocalypse

David Mathew

A rhizanthous plant, I recently learned, is one which flowers directly from the root, or appears to. Despite the narrator's fondness for wildlife in John Updike's ***Toward the End of Time*** (Hamish Hamilton, £16.99) this was not a fact I discovered within the book's pages; but it stood me well while reading. I'd been thinking of the term *rhizanthous text*, and hoping that no one had beaten me to it, when I realized that the Updike could be considered a first-rate example. Rhizanthous text: that which flowers from its root, needing no stem of narrative on which to grow; that which blooms, looks beautiful, and does not open much after its initial blossom. It is there for everyone to see.

In *Toward the End of Time* the year is 2020, and a recent war with China has thinned out the American population. Our narrator is Ben, a 66-year-old moaner (this is not so much Elric at the end of time as Victor Meldrew or Walter Matthau) but he has plenty to complain about. Although disease is of the past, old age has brought horrors: "my dreams these days are repellent shambles of half-forgotten faces contorted by the stress of old predicaments... Dreaming, I am unhappy, and yet in morning light I resist waking, lying in bed, collapsing under another doze..." He is visited on a regular basis by thugs who demand protection money (police are of the past too).

Ben obsesses about vegetation and golf (for this reviewer's money, two tedious topics, which not even Updike could lift off the ground): but more regularly about sex. As ever, Updike has a hard-headed reliance on the depiction of sexual relationships. Ben has gone off his wife: "After a certain age marriage is mostly... a mental game of thrust and parry played on the edge of the grave. If she finds me dead of a heart attack with the air conditioner in my arms she will never forgive herself: good." But he lusts after a drug-addled prostitute, his own daughters-in-law, and much later, a 14-year-old girl who accompanies a team of cash-collectors. (Women who roll their eyeballs up at Woody Allen's later films will do the same, I should imagine, when reading this Updike. *I am virile still!* both men bellow.)

One mainly reads Updike for the quality of the prose. Possibly the reason that Updike is still working after so many years is that he has never burned himself out with plot. It's almost as though he disdains such trivialities. The best Updike novels (paradoxically) are the ones that cannot be remembered a few weeks after they have been read; the ones in which there is little plot for the memory to cling to: these books are made of careful riffs and spellbinding passages... Updike's 21st-century Massachusetts is a world surprisingly free of agitation; and anyone who wanted this journey into sf to be jumpy, wiry and barbed will be disappointed. *Toward the End of Time* is written in a mixture of languid and melancholic prose – but in a style that occasionally sparkles:

"My grandchildren, spread along Route 128 in the residential gristle between its ossified centers of commerce, tend to have tony, English-tinted names... It quickens my senile tears to think of them all marching – toddling, creeping – into the future, lugging my genes into the maelstrom of a future world I will never know."

This periphrastic style – this omnivorous approach to one's vocabulary – will not be to everybody's taste, but this reviewer enjoyed it (even his lifelong fans might feel they could have gone without half a page about his erection). It is almost as though Updike believes the world's lexicon to be going out of fashion. Updike compresses time by juxtaposing scenes involving the generations of his family's life; and by making it seem the norm for a man edging towards 70 to have dirty thoughts for a 14-year-old girl. It is a world without time, or nearly so; where the only temporal references are the events of the war. There is little for Ben to look forward to – and Armageddon was never meant to be like this. Ben's victories are small – tending to the garden, installing the air conditioner – and he seeks revivification (in part) by trying to know the youths who have seen off his regular protectors.

Toward the End of Time is strange, lonely, haunted. Wise.

There is no similar sense of underplaying the apocalypse in Mona Clee's ***Overshoot*** (Ace, $5.99). In this over-fussy tale of liberalism and Green Party rantings, the reader is *frequently* reminded of the effects of global warming: "After all, it was only the last week of April," our waffling octogenarian narrator states. "It did not seem too much to ask that the early morning air be sweet and cool. I momentarily forgot that the year was 2032; I forgot that the gentle climate I had once known was only a memory." Perhaps (and here we must be charitable) the repetitions of the narrator should be used as a means of showing her age.

Moira speaks as though she's been in a bug-eyed LSD trance since the 1960s, and she describes the events of the months leading up to New Year's Eve, 2032. She and her friends struggle to make it through each day in the burning heat (a "bummer"). One of these friends, Rhiannon, "an adherent of a modern eclectic faith with philosophical roots in ancient, pre-Christian religions that venerated the Earth" (for crying out loud) is a computer hacker who gets involved electronically with the Green Man, an organization that is attempting to save the world. Various well-paced adventures occur: the group adopts a dog and gets involved in a plot to save a baby's life. But more importantly (it seems) they get wrecked on whisky and tell stupid jokes, and generally act like any bunch of friends. Moira has to take

the reader back further, into her own youth, before the real picture emerges.

In the 1970s Moira attended the University of London, where of course the seeds were sown. She learned of the Green Man – "the symbol of an imperiled Earth" – and a good friend was killed in Tiananmen Square. Or was he? "The core of my being – my soul, if you will – was at that time totaled. Cauterized dead away by powers beyond my control." Years later, the past comes home to roost...

This novel is going to *annoy* people. Not because of its lazy cultural qualifiers ("The Berkeley Flea Market always reminded me of a scene from that old 1970s movie *A Boy and His Dog*"), nor even for the odd stance of spending a lot of time defining the *fictional* present (i.e 2032) by referring to the *reader's* present; there are references to Beatrix Potter, Jane Fonda and Ted Turner, Darth Vader and the Empire, et cetera. What's odd about *Overshoot* is how outdated it already seems, despite its Internet plot hook. There's no real element of danger, or much to chew on. A contagious flu is released and Rhiannon states: "objectively it does appear that we are in... a mess of trouble... Civilization is likely to break up into tiny bands of people just like in every post-apocalypse movie you can think of."

You said it, sister.

Last year Katie Waitman was being carneyed by her publisher as the "Discovery of the Year" and ***The Merro Tree*** (Del Rey, $5.99) is certainly a confident, lithe debut. The Bildungsroman of a sensitive child, its subject is Mikk, a sickly boy who hears noises in his head, and who instigates the wrath of his mother and claims to see things that others cannot. His music lessons are a disaster. Sent to a boarding school called the Academy – "an actor factory, haven to the adequate, anathema to the gifted" – Mikk continues to court trouble, but is at least good at singing. His instructor is the 900-year-old Huud, "a perfectionist and a bastard" in his own delicate phrase, under whose tutelage Mikk develops the aim to "take different art forms from world to world so people can enjoy them and learn about other ways of experiencing reality."

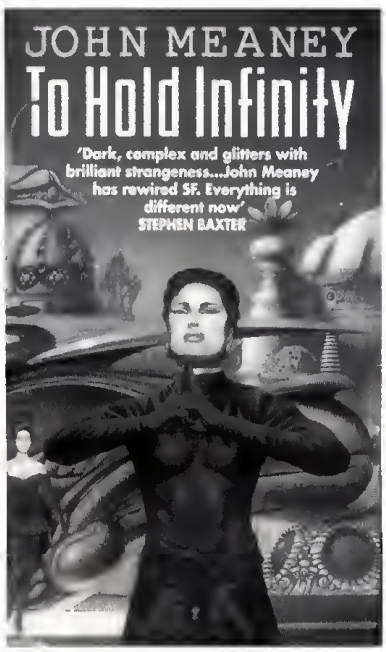
Some people, however, are magnets for disaster – and Mikk is one of them. Before long Mikk is defying a ban on his art form, and the reader is on planet leave with the artist, hoping that the dramatic trial that must follow will go in his favour. A judicial defeat will result in his death... Therefore, it is the interesting area of artistic control and freedom that Waitman explores in the novel, to good effect.

Consider the following: "Flicker. Blindspin. Darkplunge. Golden light-fragments rip apart cobra's death-promise eyes. Laughter spirals. A muted discord: cymbals clash. Light, and light, kaleidoscopic fireworks burst above, below, drowning distant muttering."

This, the first paragraph of John Meaney's ***To Hold Infinity*** (Bantam, £5.99) sent this reviewer into a blind panic. *The book is 550 pages long!* I was protesting; *I'll never make it!* But of course this style is not kept up for the duration. However, it would be wrong to say that the book gets much easier. The prose is terse and obsessive; a nightmare of glaring advertisements and neon. Here, Meaney has found an original and authentic manner of expressing a future weirdness: not only is the *plot* unpredictable, but the style of telling is too.

Beneath the glitz and the crackling wires, though, there is some necessary human interest. Yoshiko goes to visit her son but gets an h mail from him that leads her to conclude: "I'm not sure he wants to see me." (An h mail is an excellent device, and an intelligent extrapolation of current trends of communication; and it is adequately described thus: "With no physical gesture, Vin caused a holo still to appear: a dark-featured man, extraordinarily handsome, with piercing eyes." H mail is e-mail, a generation or two down the line.)

The son has got himself into trouble and has gone to be with some outcasts and eco-warriors. Yoshiko, a focused, determined woman, takes it upon herself, and her support group of women, to find him. They meet a source of information called Mr Stargonier, who states: "I think he had stolen some info. He was very edgy and well, security was a speciality of his, and he had some good AIs and tool-kits for working in the field." So beneath the surface of Meaney's inventions is a good old-fashioned detective story, of sorts. That the dialogue is so bogged in the 20th century might be surprising. Wouldn't earth-level speech have developed in line with scientific progress? "So we're not going to get carved into sushi," Yoshiko asks at one point, and is answered: "How gross."



Difficult, daring and ambitious, *To Hold Infinity* is a shocking first novel – in the best sense of the term.

Finally, and briefly, ***Eternity Road*** by Jack McDevitt (HarperCollins, £5.99) is an easy soother that despite the far-future of the plot, could have been written at any point from 1950 onwards. At times it reminded this reviewer of Asimov. Like the Meaney, it is a novel about a separated family, only this time there is a woman looking for her vanished brother. McDevitt's springboard premise is one which is visited in sf for comedy value from time to time: the idea of future generations examining the idiosyncrasies of the historic period through which we have lived by examining the trash left behind. Hence, archaeologists of the future will debate the significance of tarmac and Pepsi cans, among other things.

Researching his forefathers, Chaka's brother goes missing while trying to find Haven – a mythical place to which mankind ran when a plague descended. Chaka is hell-bent on finding both Haven and her brother, and her travelling companions are (for this type of quest) fashionably disparate: Silas "a willing listener, a man with whom it was possible to share a mature viewpoint. Quait and Chaka were young and impulsive, Shannon thought anyone who didn't live in the woods was a slave, and Avila was a religious fanatic who had not come to terms yet with the fact she had walked away from her gods." Not to mention, of course, "an IBM Multi-Interphase Command and Axial Unit, Self-Replicating series" – called Mike – that wants to die, if indeed it is "alive" in the first place.

The whole idea of revisiting paradise could be taken as a hamfisted religious allegory, but it doesn't have to be. *Eternity Road* is breezy entertainment and nicely done. Read alongside the Meaney, it shows how diverse, and in what good health, science fiction is as we slip and slide towards the Millennium.

David Mathew



Big Names

Neil Jones

There's a new Discworld novel out. It's called ***The Last Continent***. True Terry Pratchett devotees will have already skipped to the end of this review because they bought the book weeks ago and they loved it. They know how much it costs (£16.99) and who it's published by, although they might have had a bit of a surprise there because Pratchett has been lured away from Victor Gollancz. Still, at least Doubleday had sense enough to stick with the traditional Josh Kirby cover.

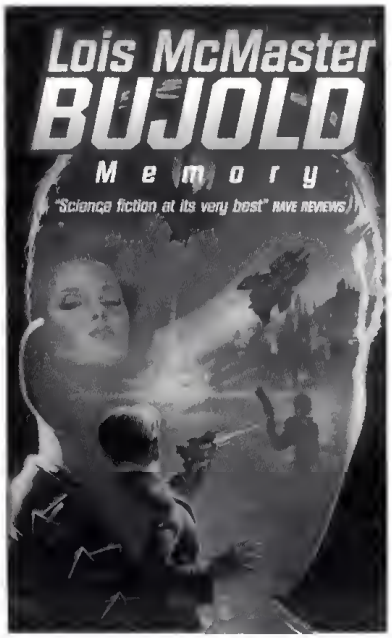
For those flinty few in the country who remain cool to the Discworld phenomenon after reading Pratchett's earlier books – excluding the first two or three where he displayed lots of chirpy promise but was not operating at his full comic (or dramatic) potential – this book is not the one to win you over because Pratchett has plateaued. That's your loss because Pratchett Plateau can now be relied on to yield humour, humanity, a certain wry wisdom, quirky likeable characters and very satisfying books. All very impressive, too, considering that Pratchett churns them out at the rate of two a year and with this latest one chalks up the 22nd Discworld entry.

If you have just stepped out of a Tardis and never even heard of the Discworld series, then (as Pratchett puts it in this latest book) no worries: Pratchett reintroduces it (and entertainingly too) in every book, so you'll learn how it manages to rests on the backs of four elephants who stand on a turtle flying through space. Then there are the characters built up over the course of the series: this book features Rincewind, the ultra-cowardly wizard who can't actually do any magic and who seems fated to land in the middle of the most dangerous situations. Supporting him are his ferociously loyal Luggage (imagine a suitcase on lots of little legs) and a choice selection of wizards from Unseen University, including the Archchancellor and the Librarian, who's currently having trouble holding his orangutan shape.

Now for the plot, which is, well, let's say – antipodean. Rincewind is marooned on the far and strange (even by Discworld standards) continent of Fourecks – which of course bears no similarity whatsoever to Australia, which is copyrighted by a different continuum entirely. Rincewind encounters a succession of strange Ecksians, including a mysterious kangaroo, Mad the Road Warrior, some brawny ladies in pink, and the local wizard contingent, while the already bone-dry Fourecks seems to be heading for a drought. Meanwhile, the UU wizards get themselves lost in the past, hobnob with a jobbing god and, eventually, meet up with Rincewind.

It's amiable, amusing, engaging, and it even has something to say in a very unpretentious way. In short, it's an excellent read, and proof that Pratchett Plateau is sunny literary territory indeed.

By contrast with Pratchett Plateauers, Lois McMaster Bujold fans are a tiny tribe – at least in the UK. Over in the States Bujold and her Miles Vorkosigan series are a phenomenon of their own, with a string of awards to their credit already, and seemingly automatic entry to the awards shortlists. Her latest Miles book, ***Memory*** (Earthlight, £5.99), is up for this year's Hugo and Nebula. But the books – and Miles – are not just popular, they're also intelligent, humane and engrossing. While Bujold clearly adores Miles, that doesn't stop her testing – and hurting – him in book after book. Miles was born weak and stunted thanks to an unsuccessful assassination attempt on his parents but grew up smart and determined, even obsessed, about testing himself to self-destruction against the unforgiving standards of his native (at least on his father's side) techno-feudal Vor culture. After a string of adventures, Miles has saved his own world from disaster several times, climbed the military ladder by sheer overwhelming ability in the secret service, and also carved out a successful sidebar career as a mercenary leader covertly aiding his own stellar nation, Barrayar.



Memory brings us to the latest and for Miles most disastrous phase in his career. While apparently fully recovered from his (temporary) death during the previous book, he is in fact suffering from mysterious blackouts. His cover-up of this leads to catastrophe for him: his boss, secret service chief Simon Illyan, cashiers him, simultaneously wiping out his twin careers as Lieutenant Vorkosigan of Imperial Security and mercenary leader Admiral Naismith. This brings him to a suicidally low point but, fortunately, there's a clever plot to foil and Miles still has his exalted rank as a Vor aristocrat to help him do it.

Although Bujold has built up her 11-book Vorkosigan saga as she has gone along, with no overarching story-arc to guide her, the seams rarely show. However, keen observers will find one here: Spymaster Illyan, a supporting character throughout the series, suddenly turns out to possess a hi-tech memory chip in his head. But this is not just forgivable but actually a shrewd plot development that fits in very neatly with her established background and also opens up a strong storyline for Miles.

Overall, this book is a satisfying new entry in a fascinating on-going series. However, although grippingly readable for most of its length, the plot starts more slowly than usual and even seems becalmed in places, along with its hero. One chapter in particular, where Miles returns to the scene of an early test (and triumph) in an attempt to find a new purpose in life, while doubtless satisfying for loyal readers, could easily have been cut without affecting the story. While this is only a very minor problem with this book, given the acclaim that Bujold routinely receives, it raises some concerns as to whether Miles's future adventures will remain as lean and dynamic as they've been up to now.

C. J. Cherryh is another sf Big Name with her own future history series, the Merchanter saga, and her share of fantasies too. As someone with a high regard for Cherryh's books and talents, I was very surprised to find that her latest book was ***Lois and Clark: A Superman Novel*** (Boxtree, £4.99). This was not because of any airy notions about top-class writers demeaning themselves by writing spinoffery – someone's got to, and good writers like Cherryh are as entitled to the money as anybody else. But Cherryh's very individual writing style and intense internalized prose hardly seem likely

to make her seem first choice to turn out the lightweight fare of the standard film/TV spin-off, and especially so when the series in question is the frothy *Lois and Clark* show.

Cherryh gives Lois and Clark separate problems: Superman is off in the ex-USSR, first saving peasants from a collapsing dam and then helping them to rebuild their lives, while Lois gains national celebrity by saving a trapped child from a mysteriously collapsing skyscraper and then follows a journalistic trail leading to her ex-fiancé, the imprisoned Lex Luthor. There are some well-thought-out insights on how Superman's various powers, such as flying and X-Ray vision, might work and what limitations they might have but Superman's adventures seem rather routine by comic-book and TV standards, and it's Lois' story that is central to the book.

Although Cherryh could have chosen to simply churn out the required number of words, she seems to have put a great deal of thought and energy into this novel. Frankly though, I doubt it is what fans of the TV show will be expecting – or wanting – because it's a much tauter and grittier story (and version of the Lois and Clark relationship) than the tongue-in-cheek TV series serves up.

For exactly the same reasons, though, Cherryh fans should seek this book out whether or not they care for the TV show, because she hasn't settled for join-the-dots spinoffery. Instead, she's produced a book that, while it's no classic, is an excellent read and can sit alongside the rest of her output without any embarrassment whatsoever.

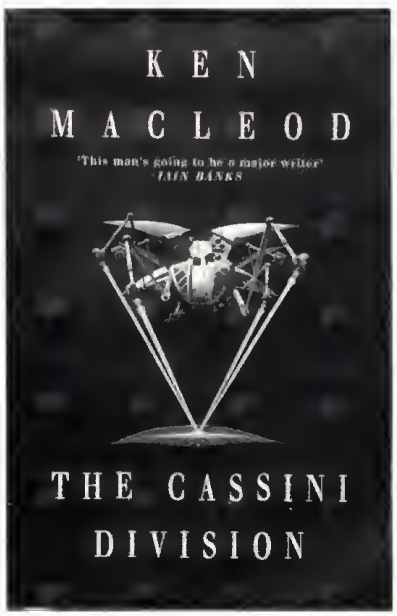
J. Michael Straczynski has become a very Big Name indeed over the last few years, particularly here in the UK, with his landmark *Babylon 5* TV series. Big enough, at least, to see Boxtree's on-going ***Babylon 5: Season by Season*** guidebooks by Jane Killick continue with ***#3 Point of No Return***, and ***#4 No Surrender, No Retreat*** (£7.99 each). Fans of the show will find them a good, if overpriced, read, packed with comments and anecdotes from various members of the cast and production team.

Perhaps the most interesting thing in the books was Straczynski's own rationale for wrapping up the Shadow War so abruptly and disappointingly in the fourth season. Partly contributing to that decision was the likelihood of season four being the last. Fortunately Straczynski got the go-ahead to do the fifth and final season at the very last minute – the final episode had been filmed and had to be locked away for a year while season five plays out. So, real soon now, we'll have a chance to see how he bookends his epic and judge it as one five-year televisual sf story – not to mention buy book #5 in this series. While it has its flaws, given its scope and ambition, its frequent successes, and the astonishing fact that Straczynski has written the bulk of the series single-handed, there's no doubt that J. Michael Straczynski fully deserves his sf Big Name status.

Neil Jones

Death to Canary Wharf, or a Tale of Two Red Kens

Ken Brown



Sometimes you find a book that seems to be written specially for you. The matter, the style, the locations, the politics just fit in with your own life, your own ideas. It seems as if the author is a friend or a relative writing with you in mind, rather than some stranger who put words on the page to make a few pounds.

That's how I felt about Ken MacLeod's debut novel *The Star Fraction*: set in London in the early years of the next century, it constantly refers back to the world of the socialist groupuscules of the second half of this century, much of the action being set in bars where the comrades sell newspapers at each other after meetings – which is the world this reviewer was brought up in, at least partly, and I suspect Ken MacLeod was as well. To be honest, it is a world that I still partly live in. Towards the end of the book there are a pair of gloriously self-indulgent wish-fulfilment socialist wet-dream scenes based on the singing of Blake's "Jerusalem" and the "Internationale" and on revolution finally spreading to the US. I loved it.

So be warned that this review is not at all objective. I read MacLeod's third novel, ***The Cassini Division*** (Orbit, £15.99), eagerly expecting to like it and I wasn't disappointed. But my strong expectations probably coloured my reading – I thought I knew what was going on. Readers of the other novels will guess that, just as the "Star Fraction" was not a part of a star but a political organization (and also a bit of ego-boo for those of us who always knew that the Red Army Fraction was not, as the TV consistently miscalled it, the Red Army *Faction*), the "Cassini Division" is a military unit: "... the Solar Union's front-line force, our collective fist in the enemy's face. In our classless society it was the closest thing to an elite; in our anarchy the nearest we came to a state..."

It is over two hundred years after the events of *The Star Fraction*: capitalism has been abolished, the word "banker" is an insult and a curse, the few remaining Greens live in squalid reserves that they are free to leave at any time, and the solar system is safe for socialist anarchism – or almost so. Jupiter has been colonized by post-human minds, "Outwarders" living in shared virtual realities, thinking and evolving at hundreds of time the speed of change on Earth. The Division has been besieging that planet for two centuries, zapping everything larger than a grain of sand that seems to be coming out, and learning to cope with a continual stream of computer viruses and information pollution generated by the speeded-up Jovians as naturally as earthly animals grow teeth and claws.

The characters in this book spend a lot of time talking about politics – which is fine, most people spend more time talking about politics than they do fighting wars or having sex or doing any of the other things novels are so often about – and the Division's socialism is based on the "True Knowledge" supposedly developed by Korean labour-camp prisoners from the works of "Stirner, Nietzsche, Marx, Engels, Dietzgen, Darwin and Spencer." To quote: "Life is a process of breaking down and using other matter, and if need be other life. Therefore life is aggression and successful life is successful aggression. Life is the scum of matter and people

are the scum of life. There is nothing but matter, forces and space and time, which together make power. Nothing matters except what matters to you. Might makes right and power makes freedom, You are free to do whatever is in your power."

From this uncompromising materialism they have somehow built a surprisingly comfortable kind of socialism – if there is one problem with the book it is that the author doesn't quite tell us how they are supposed to have got there from the True Knowledge, it seems to me that starting at the same place you could just as easily arrive at fascism or free-market capitalism – and life has become easy for most people. So easy in fact that they are beginning to talk about dropping their guard and contacting the Jovians, maybe even trading with them.

The Cassini Division take this in much the same way as the old Soviets reacted to the idea of freeing Rudolf Hess. Desperate to forestall any chance of peace, they send Ellen May Ngwethu (an old comrade with a deep belief in the True Knowledge and personal reason to hate the Outwarders) to Earth to fetch Isambard Kingdom Malley, a great physicist who they say can help re-open the wormhole to New Mars; ostensibly to fetch help to contain the Jovians, but in fact as part of a complicated plot meant to lead to the complete sterilization of Jupiter, a "justifiable genocide," something that will need to be done before public opinion makes it impossible. She does find Malley, and they go to New Mars (where they meet most of the cast of *The Stone Canal*, to which this book is in a sense a sequel); as you would expect, there are adventures and revelations and escapades, and things are brought to a more or less satisfying conclusion.

If there is one *really* odd thing about this novel, it is that it is pretty clearly an apology for the old Soviet Union. The Cassini Division's ring of fortifications around Jupiter seems to be compared to the Berlin Wall – the visible statement that fascism was not to be tolerated in Europe. It isn't a simple apology for the USSR – not like all those books that I saw as a child (I suspect Ken Macleod may have as well) in which well-fed and bright-eyed Soviet children ate beautiful apples grown in Siberia by the people's science of Lysenko inspired by the teachings of comrade Stalin – but it does seem to say that harsh methods are necessary for dangerous times, and that sometimes unpleasant people are needed to do the dirty jobs. Fifty years ago the job was destroying German fascism, in this book, it is fighting the Jovians. As someone says on the last page "What *else* are communists *for?*"

I like the book. I like the way it does talk about real political issues. I like its wisecracking style: an AI trying to pass a Turing test is "faking an organism"; distances on spaceships are measured in feet and inches because the vessels are descended from ships built to NASA specs. But the thing I liked best is in chapter 4 (called "The State of the Art" – the chapters are mostly named for classics of political sf: "Looking Backward," "After London," "News from Nowhere"; so in context the chapter title is a tribute to Iain Banks, putting him on the same stage as Wells, Lytton, Morris, Bellamy and the rest). I read the chapter at an office building in Canary Wharf, London, overlooking the Thames. Ellen Ngwethu's ship the *Terrible Beauty* (excellent name) takes off from the bed of the river to the cry of, "Eat proton death, Canary Wharf!"

Now *that* is a good line.

Ken Brown

A Plague on All Your Houses

David Pringle

"America is a nation of liars, and for that reason science fiction has a special claim to be our national literature, as the art form best adapted to telling the lies we like to hear and to pretend we believe." So begins chapter one, "The Right to Lie," of this new book about sf by the field's second-greatest iconoclast (the field's greatest iconoclast has to be J. G. Ballard – of whom more later – but it is hard to imagine JGB writing an entire book about the genre: his collected jottings, *A User's Guide to the Millennium* [1996], are the nearest we're likely to get). The second-greatest iconoclast is of course Thomas M. Disch, and his book is called ***The Dreams Our Stuff is Made Of: How Science Fiction Conquered the World*** (Simon & Schuster/Free Press, $25).

Some of us have followed, with mixed delight and discomfort, Tom Disch's occasional non-fiction writings over the years. Best known of them is probably his 1975 talk, "The Embarrassments of Science Fiction" (reprinted in Peter Nicholls's *Science Fiction at Large*, 1976), in which he argued that sf is essentially a juvenile literature, written for kids (or for the kid in us all) even when it is trying to be "adult." He revisited that theme in a more recent piece, "The Further Embarrassments of Science Fiction" (*Atlantic Monthly*, February 1992), wherein he traced the alleged childishness of the genre all the way back to Edgar Allan Poe. Other well-known pieces, written for American papers but several of them reprinted right here in *Interzone*, were not so much about science fiction as about the murky penumbra of credulity which surrounds the genre – his lambasting of Whitley Strieber's "non-fiction" books about alien abduction ("The Village Alien," *IZ* 25, and "Primal Hooting," *IZ* 29); his review of Peter Washington's excellent history of quasi-religious cults, *Madame Blavatsky's Baboon* (*IZ* 102); and his excoriation of William Pierce's fascistic semi-underground sf novels *The Turner Diaries* and *Hunter* (*IZ* 103).

Well, *The Dreams Our Stuff is Made Of* is *not* a simple gathering together of those various pieces, but it subsumes them. Disch has taken his published thoughts on most of his favourite hobby-horses from over the years – science-fictional, pseudo-scientific, psychological and political – and rewritten and expanded them, together with a considerable amount of personal reminiscence and "confession," into this highly entertaining new volume which is sure to annoy a great many people. He boots the usual *bêtes noirs* (Hubbard, Strieber, and erstwhile fellow-travellers like John W. Campbell); he launches assaults against the familiar fascists (Heinlein, Pournelle and the whole "Baen Books axis" down to, heaven help us, Newt Gingrich); but he also attacks, quite mercilessly, more counter-culturally *chic* figures such as William Burroughs ("who was not only embalmed in heroin through most of his adult life but had murdered his wife – and, like O. J. Simpson, got away with it") and the critically-praised politically-correct such as Ursula Le Guin ("[her] feminism is less overtly phobic of the male sex than that of Andrea Dworkin, but it is no less absolute... Ideology breeds nonsense and ... Le Guin's work has undergone a gradual PC ossification"). There are hard words too for Samuel R. Delany: "His fiction production slowed down in the '80s and became ... ever more tendentiously the podium for his non-SF interests: the intellectually intertwined realms of deconstructive literary criticism and queer theory. At his nadir, he produced a novel/memoir/diatribe, *The Mad Man*, with the doubtful thesis that HIV is *not* the

them. Disch has taken his published thoughts on most of his favourite hobby-horses from over the years – science-fictional, pseudo-scientific, psychological and political – and rewritten and expanded them, together with a considerable amount of personal reminiscence and "confession," into this highly entertaining new volume which is sure to annoy a great many people. He boots the usual *bêtes noirs* (Hubbard, Strieber, and erstwhile fellow-travellers like John W. Campbell); he launches assaults against the familiar fascists (Heinlein, Pournelle and the whole "Baen Books axis" down to, heaven help us, Newt Gingrich); but he also attacks, quite mercilessly, more counter-culturally *chic* figures such as William Burroughs ("who was not only embalmed in heroin through most of his adult life but had murdered his wife – and, like O. J. Simpson, got away with it") and the critically-praised politically-correct such as Ursula Le Guin ("[her] feminism is less overtly phobic of the male sex than that of Andrea Dworkin, but it is no less absolute... Ideology breeds nonsense and ... Le Guin's work has undergone a gradual PC ossification"). There are hard words too for Samuel R. Delany: "His fiction production slowed down in the '80s and became ... ever more tendentiously the podium for his non-SF interests: the intellectually intertwined realms of deconstructive literary criticism and queer theory. At his nadir, he produced a novel/memoir/diatribe, *The Mad Man*, with the doubtful thesis that HIV is *not* the cause of AIDS, a favorite lost cause among queer theorists..."

Disch hates liars, and every which way he looks he finds them – to such an extent that his entire vision of the sf genre, and of the modern world, comes to resemble a picture of a madhouse run by the mendacious, the venal and the terminally stupid (which is a fair description of the subject matter of his novels and short stories too: it's hardly surprising that he has never been among the most widely loved of writers). What will probably fascinate most sf readers, and guarantee this book a *succès de scandale*, are not so much his public attacks on the above-named persons as his personal anecdotes – there are nice descriptions of his own late-1960s acid trips, ranging from a good trip in Spain "before a wide prospect of the Mediterranean, across the surface of which, in living Arabic script of wave foam, I read the ineffable" to a bad trip in Surrey "where a field of barley became as menacing as one of Van Gogh's last, minatory paintings" – and, to phrase it bluntly, his bitchy gossip. On meeting the late Theodore Sturgeon, we are told, our Tom "was persuaded to sample the nudist lifestyle and invited to stay overnight for a threesome with Mrs Sturgeon (an opportunity I declined)."

His several meetings with J. G. Ballard in 1966 and after, we are told, "took the invariable form of a trip to the Shepperton train station south of London and then a terrifying ride with Ballard at the wheel of his sports car. At his home, a dilapidated, infinitely cluttered bungalow that he shared with his two children, Ballard, fuelled with whisky, would deliver an oral version of his private gospel. Sad to say, I remember not a single oracle from those occasions, only a sense that the man was, as advertised, a genius hard-wired to the Zeitgeist." Memory may play even the greatest truth-tellers false, and as one who has visited the same house on half a dozen occasions from the 1970s to the 1990s I can testify that Ballard lives in a classic British semi-detached, not a "bungalow," and that he raised three children there throughout the 1960s, not two; also I can vouch for the fact that JGB's front door is less than five minutes' walk from Shepperton station (which lies west of London, not south), so why a car-ride was necessary I can't imagine. As for the drinking and hairy driving of the period following his wife's death in the mid-1960s, Ballard has described those things himself in several interviews – and has even fictionalized them, in a chapter called "The Exhibition," in his novel *The Kindness of Women* (1991); so, no surprises there – except, perhaps, for the revelation (if true) that JGB once drove a sports car.

While there can be no doubt that Tom Disch's book will entertain (and enrage) many within the sf field, we are entitled to ask whether it will do anything to modify the low opinions of the genre held by outsiders. In one sense, it may have a positive effect: Disch is himself "an acclaimed science-fiction writer" (the first line of his book's blurb tells everybody so) and it must be a brave new genre that has such acidulous critics in it. He also finds words of genuine praise for a few specific writers and works: Joe Haldeman emerges as a hero in Disch's eyes for his fine sf novel *The Forever War* (1974), founded on lived experience; more surprisingly, dear old Hal Clement is praised unstintingly for giving us, in *Mission of Gravity* (1954), a world which is "mud luscious and puddle wonderful" – a quotation from e. e. cummings, if I remember rightly, but sweetly chosen. Arthur C. Clarke is also treated kindly, and Joanna Russ respectfully. The collaborative novels of Frederik Pohl and Cyril Kornbluth are commended only in passing, and I rather miss the more extended treatment Disch could have given here to that "pair of magnificent smart-alecks" (a phrase from an early Disch essay, not repeated in this book). In fact, Disch apologizes in his introduction for not finding space to praise more fully the works of the writers he admires most: he nods towards Gene Wolfe, John Crowley and Paul Park.



There are at least two other writers Disch holds in high respect, and about whom he has a good deal to say – H. G. Wells and Philip K. Dick. His comments on the former seem dutiful rather than impassioned, while his comments on the latter are more personal – though oddly distanced: he quotes himself being quoted in Laurence Sutin's biography of Dick. Overall, though, this book is a hatchet-job on science fiction, and is most unlikely to convert anyone to the genre – not that proselytizing for the category is Disch's purpose: rather, he is out to raise dark laughter. From Mary Shelley to Orson Scott Card, few writers are spared Disch's withering comments. Above all, sf is conflated with the idiocies of pseudo-science, the juvenilities of Hollywood and the mass media, and the simplistic politics of Colonel Ollie North and a legion of other liars. Science fiction, for Disch, bears at least some responsibility for all of modern America's sins.

But I am not convinced by Disch's thesis that sf is essentially an American genre. Indeed, he undermines his own case. Clearly it's a form which began in Europe and whose greatest exponent (Disch describes him as such!) was an Englishman, H. G. Wells. Actually, Disch is writing, rather confusingly, about two different science fictions – literary sf on the one hand, and cross-media "sci-fi" on the other (there's too much of a concentration on the latter in his book). Sci-fi, perhaps, *is* an American phenomenon (although the Japanese and British have contributed significantly to it: think of Godzilla and Doctor Who); but literary sf – at any rate in its larger, Darko-Suvinian

BOOKS RECEIVED



APRIL 1998

The following is a list of all sf, fantasy and horror titles, and books of related interest, received by Interzone during the month specified above. Official publication dates, where known, are given in italics at the end of each entry. Descriptive phrases in quotes following titles are taken from book covers rather than title pages. A listing here does not preclude a separate review in this issue (or in a future issue) of the magazine.

Ackroyd, Peter. **The Life of Thomas More.** Chatto & Windus, ISBN 1-85619-711-5, 435pp, hardcover, cover by Hans Holbein the Younger, £20. (Biography of the author of *Utopia*, first edition; this impressively-written illustrated tome is just a part of Ackroyd's ongoing attempt to "do" London and famous Londoners in both fiction and non-fiction, a project which now ranges from his celebrated horror novel *Hawksmoor* [1985] through fat biographies of Dickens and Blake to recent imaginative novels such as *The House of Doctor Dee* [1993], *Dan Leno and the Limehouse Golem* [1994] and *Milton in America* [1996]; his next novel, we are pleased to hear, will be a utopian piece set in future London – a project for which this biography of the founder of utopian fiction [and therefore of science fiction] was obviously an excellent preparation; recommended.) *No date shown: received in April 1998.*

Anthony, Patricia. **Flanders.** Ace, ISBN 0-441-00528-4, 354pp, hardcover, cover by Diane Fenster, $23.95. (Fantasy novel, first edition; set on the Western Front, during World War I, this appears to be a [serious] fantasy, yet the cover states "science fiction"; Anthony is beginning to look like a writer who will always deliver the unexpected: her last novel, *God's Fires*, was set in Renaissance Portugal but was, indeed, sf – see the review by Paul McAuley in *Interzone* 122.) *1st May 1998.*

Anthony, Piers, James Richey and Alan Riggs. **Quest for the Fallen Star.** Tor, ISBN 0-312-86409-4, 414pp, hardcover, $25.95. (Fantasy novel, first edition; proof copy received; on the spine and back cover of this proof edition the middle author's name is given as James Richey Goolsby [and we're told that he lives in Pflugerville, Texas – what a place-name!]; there are separate explanatory afterwords by the three authors, from which one gathers that this was Richey's [i.e. Goolsby's] novel which Piers Anthony agreed to revise and polish, and for which Anthony then brought in his researcher-cum-assistant writer Riggs to do much of the actual work.) *July 1998.*

Ashley, Mike, ed. **The Mammoth Book of Comic Fantasy.** Robinson, ISBN 1-85487-530-2, xv+524pp, B-format paperback, cover by Julek Heller, £6.99. (Humorous fantasy anthology, first edition; it contains reprint stories by Terry Bisson, Molly Brown [from *Interzone*], Lewis Carroll, Avram Davidson, Alan Dean Foster, Esther Friesner, Craig Shaw Gardner, Randall Garrett, Ron Goulart, Harvey Jacobs, Terry Jones, R. A. Lafferty, David Langford, Edward Lear, Richard A. Lupoff, Terry Pratchett, Robert Rankin, Jack Sharkey, Harry Turtledove, Jane Yolen and others, together with original stories by James Bibby, Peter Cannon, Louise Cooper, Neil Gaiman, Anne Gay, Tom Holt, F. Gwynplaine MacIntyre and Amy Myers; as usual, Ashley has gone out of his way to include some unfamiliar material; recommended.) *30th April 1998.*

Borchardt, Alice. **The Silver Wolf.** Del Rey, ISBN 0-345-42360-7, 451pp, hardcover, $24.95. (Historical horror/romantic novel, first edition; proof copy received; a werewolf novel set at the time of Charlemagne, it's by Anne Rice's sister and is aimed pretty much at the market segment you might expect: "Readers, fans, friends... I present to you my sister... Alice Borchardt," states Rice in an endorsement.) *July 1998.*

Bova, Ben. **Moonwar: Book II of The Moonbase Saga.** New English Library, ISBN 0-340-68251-5, 531pp, A-format paperback, cover by Mark Harrison, £6.99. (Sf novel, first published in 1997; reviewed by Paul McAuley in this issue of *Interzone*.) *28th April 1998.*

Bradbury, Ray. **Quicker Than the Eye.** Earthlight, ISBN 0-671-01784-5, viii+261pp, A-format paperback, cover by Jim Burns, £5.99. (Fantasy/mainstream collection, first published in the USA, 1996; this is the first UK edition; it contains 21 whimsical and fantastical stories, some of them original to the book and most of the others first published in magazines or anthologies of the 1990s; reviewed by Pete Crowther in *Interzone* 116.) *7th April 1998.*

Bradley, Marion Zimmer. **Lady of Avalon.** Penguin, ISBN 0-14-024193-0, xii+432pp, A-format paperback, cover by Philip Argent, £6.99. (Historical Arthurian fantasy novel, first published in the USA, 1997; sequel to *The Forest House* [1993; referred to by Penguin as *The Forests of Avalon* – have they retitled it?] and prequel to *The Mists of Avalon* [1982]; we never saw the hardcover [Michael Joseph, 1997], and this is the third Penguin printing already – which means it must have "sold in" well to the trade; it's dedicated to Diana L. Paxson, "without whom this book could not have been written" – which we take to be a coded hint that Paxson probably wrote much of it: Bradley is said to be in poor health these days, and Paxson certainly has the qualifications, having written several Dark Age historical fantasies of her own in years gone by.) *7th May 1998.*

Broderick, Damien. **The White Abacus.** Avon/Eos, ISBN 0-380-79615-S, 342pp, A-format paperback, $5.99. (Sf novel, first published in the USA, 1997; reviewed by Gwyneth Jones in *Interzone* 122.) *April 1998.*

Clark, Simon. **Vampyrrhic.** Hodder & Stoughton, ISBN 0-340-69608-7, 441pp, hardcover, cover by Chris Moore, £16.99. (Horror novel, first edition; Yorkshire vampire stuff.) *21st May 1998.*

Dozois, Gardner, ed. **The Year's Best Science Fiction: Fifteenth Annual Collection.** St Martin's Griffin, ISBN 0-312-19033-6, undetermined roman-numeral pages+623pp, C-format paperback, $17.95. (Sf anthology, first edition; proof copy received; there is a simultaneous hardcover edition priced at $29.95 [not seen]; it contains stories by Stephen Baxter, Gregory Benford, Alan Brennert, Greg Egan [twice], Carolyn Ives Gilman, Simon Ings, Gwyneth Jones, James Patrick Kelley, John Kessel, Nancy Kress, Geoffrey A. Landis, Paul J. McAuley, Ian McDonald, Ian R. MacLeod, Robert Reed, Robert Silverberg, Brian Stableford, Michael Swanwick, Howard Waldrop, Sean Williams & Simon Brown, Walter Jon Williams and others; three of the stories are from *Interzone* – Egan's "Reasons to Be Cheerful," Peter F. Hamilton's novella "Escape Route" and Alastair Reynolds's "A Spy in Europa"; recommended, as ever.) *June 1998.*

Dozois, Gardner, and Sheila Williams, eds. **Isaac Asimov's Camelot.** Ace, ISBN 0-441-00527-6, 241pp, A-format paperback, cover by Sir Edward Burne-Jones, $5.99. (Fantasy anthology, first edition; stories on Arthurian themes culled from *Asimov's SF Magazine*, 1979-1995; authors include Eleanor Arnason, Esther M. Friesner, Tanith Lee, Megan Lindholm, Michael Swanwick, Jane Yolen and Roger Zelazny, among others.) *May 1998.*

Farland, David. **The Sum of All Men.** "Book 1 of *The Runelords*." Earthlight, ISBN 0-684-84028-6, 661pp, C-format paperback, cover by Darrell K. Sweet, £9.99. (Fantasy novel, first edition; a debut book by an apparently new American writer [said to be a pseudonym for an already-established sf novelist]; we listed the U.S. [Tor Books] edition a couple of months ago; now that we get to see it, it turns out that this UK edition is in fact the first – the U.S. one won't be out until July 1998; a

pity the British publishers didn't send it to us until after publication...) *7th April 1998.*

Feist, Raymond E. **Shards of a Broken Crown: Volume IV of the Serpentwar Saga.** Avon/Eos, ISBN 0-380-97399-S, 417pp, hardcover, cover by Liz Kenyon, $24. (Fantasy novel, first edition; yet another book with the word "shards" in the title: why is has this Anglo-Saxon term, described as "archaic" in the *Concise Oxford Dictionory*, and traditionally best known in the form "sherds" [as in archaeologists' and gardeners' "potsherds"], become such a favourite with sf and fantasy writers?) *11th Morch 1998.*

Feist, Raymond E. **Shards of a Broken Crown.** "Volume Four of the Serpentwar Saga." Voyager, ISBN 0-00-2246S4-6, 417pp, hardcover, cover by Geoff Taylor, £17.99. (Fantasy novel, first published in the USA, 1998; the accompanying press release contains some interesting information: "Raymond Feist," it says, "is the second biggest selling fantasy writer in the world, enjoying 12 million sales to date"; assuming they are referring only to living writers here [Tolkien would wipe the floor with any of them], who can the biggest seller be – David Eddings, perhaps, or Robert Jordan? [last we heard, Terry Pratchett, who has never made a real breakthrough in America, is still some way behind Feist but probably catching up, thanks to growing sales outside the USA – he's become a big seller in Poland, for example, where his *translator* is fêted as a star].) *15th June 1998.*

Flynn, Michael. **The Forest of Time and Other Stories.** Tor, ISBN 0-312-86S87-2, 381pp, trade paperback, cover by Bruce Jensen, $13.9S. (Sf collection, first published in the USA, 1997; nine stories, most of them reprinted from *Analog*, plus a novella, "Melodies of the Heart"; reviewed by Chris Gilmore in *Interzone* 119.) *9th April 1998.*

Fowler, Bo. **Scepticism Inc.** Cape, ISBN 0-224-0S124-S, 248pp, C-format paperback, £9.99. (Sf/fantasy novel, first edition; a debut novel by a new British writer, born 1971, it's set in the 21st century and is narrated by a supermarket trolley; a "mainstream" presentation by an author who studied creative writing under Malcolm Bradbury at the University of East Anglia, it has received praise in the UK press and has been compared to the satires of Kurt Vonnegut.) *8th April 1998.*

Gardner, James Alan. **Commitment Hour.** Avon/Eos, ISBN 0-380-79827-1, 343pp, A-format paperback, $5.99. (Sf novel, first edition; set on a future depopulated Earth, a second novel by this new Canadian writer whose first, *Expendable*, came out less than a year ago.) *April 1998.*

Gloss, Molly. **The Dazzle of Day.** Tor, ISBN 0-312-86437-X, 2SSpp, trade paperback, $12.95. (Sf novel, first published in the USA, 1997; a serious, utopian work about a Quaker-ish space colony, it comes commended by Ursula Le Guin, Vonda McIntyre, Cherry Wilder and others.) *10th April 1998.*

Green, Simon R. **Deathstalker Honour.** Vista, ISBN 0-S7S-60178-7, 621pp, A-format paperback, £S.99. (Sf novel, first edition; proof copy received; the accompanying publicity sheet describes it as "the fourth and final part of the life and times of Owen Deathstalker," but the final page of the proof states: "Owen Deathstalker will return one last time in *Deathstolker Destiny*.") *18th June 1998.*



Haggard, H. Rider. **The People of the Mist.** "An outstanding classic by a world master!" Pulp Fictions [PO Box 144, Polegate, East Sussex BN26 6NW], ISBN 1-9020S8-00-3, 343pp, B-format paperback, cover by Tania Lomas, £4.99. (Lost-race novel, first published in 1894; this may be the first-ever UK paperback edition of a favourite old African adventure story which, to the best of our knowledge, was last in print in the 19S0s and 1960s in a library hardcover edition from Macdonald; the text is photographed from an old edition, possibly the Longmans 1894 first, complete with the original illustrations by Arthur Layard; "Pulp Fictions" appears to be a new publishing imprint which describes itself as "A Division of Pulp Publications Ltd"; there is a family resemblance to Warren James Palmer's "Ripping Publishing," although the address is different [Polegate, Sussex, as opposed to Epsom, Surrey] and the accompanying publicity letter is signed by one Matt Weyland; other titles which have been announced are *Lair of the White Worm* by Bram Stoker, *Murders in the Rue Morgue and Other Stories* by Edgar Allan Poe, and – coming in autumn 1998 – *She*, *Ayesha* and *She and Allon*, all by Rider Haggard; we hope they succeed in finding a new, young public for this old stuff.) *April 1998.*

Harris, Anne. **Accidental Creatures.** Tor, ISBN 0-312-86S38-4, 286pp, hardcover, $22.9S. (Sf novel, first edition; proof copy received; on a biotech theme, this is a second novel by a new American writer whose first was called *The Noture of Smoke* [1996].) *July 1998.*

Harrison, M. John. **Signs of Life.** Flamingo, ISBN 0-00-6S4604-8, 2SSpp, B-format paperback, cover by Dave McKean, £6.99. (Sf novel, first published in 1997; it incorporates the short stories "Anima," first published in *Interzone* S8 [April 1992], and "Isobel Avens Returns to Stepney in the Spring," first published in *Little Deoths* edited by Ellen Datlow [1994]; reviewed by Paul McAuley in *IZ* 120.) *20th April 1998.*

Holdstock, Robert. **Gate of Ivory.** Voyager, ISBN 0-00-224604-X, 287pp, hardcover, cover by John Howe, £16.99. (Fantasy novel, first published in the USA as *Gate of Ivory, Gate of Horn*, 1997; a new "Ryhope Wood" novel, follow-up to *Mythago Wood* [1984], *Lavondyss* [1988], *The Bone Forest* [1991] and *The Hollowing* [1993]; for some reason, this first UK edition is appearing six months after the US [Penguin/Roc] edition, with a curtailed title – which, apparently, was not to the author's wishes.) *5th May 1998.*

Irving, Clifford. **The Spring.** Pocket, ISBN 0-671-S1648-S, 287pp, A-format paperback, cover by Sam Hadley, £S.99. (Marginally sf/fantasy thriller, first published in the USA, 1996; set in Colorado, this appears to be straight crime fiction, but it turns out that the "spring" of the title is the Fountain of Youth; Irving is the author who became notorious about 20 years ago for publishing *The Autobiography of Howard Hughes*; among his other books are such titles as *Fake!* and *The Hoax* – so maybe he has been a "fantasy writer" all along.) *5th May 1998.*

Lackey, Mercedes. **Four and Twenty Blackbirds.** Voyager, ISBN 0-00-64803S-7, 423pp, A-format paperback, £S.99. (Fantasy novel, first published in the USA, 1997; described by the publishers as "a murder mystery with a twist of magic.") *18th May 1998.*

McCaffrey, Anne. **Freedom's Challenge.** "The third of the fascinating Catteni sequence." Bantam Press, ISBN 0-S93-04318-9, 288pp, hardcover, cover by Peter Elson, £15.99. (Sf novel, first edition [?].) *21st Moy 1998.*

Morris, Sally, and Jan Hallwood. **Living with Eagles: Marcus Morris, Priest and Publisher.** Foreword by Sir Tim Rice. Lutterworth Press [PO Box 60, Cambridge CB1 2NT], ISBN 0-7188-2982-4, 311pp, hardcover, £2S. (Biography of the founder of the *Eagle* comic, first edition; gosh, this book is like a time machine, taking one back to the strange, fusty little world of British magazine publishing in the 1940s and 'S0s; Morris, who along with artist Frank Hampson was responsible for the creation of Britain's first major "cross-media sci-fi" sensation, spaceman Dan Dare, was also a mini-mogul of some importance in his day, later working for Hearst's National Magazine Company and going on to launch the British edition of *Cosmopolitan* among other

things; for those nostalgic for Dan Dare, this is an interesting read, but it also serves as a history of UK magazine publishing in the second half of the 20th century; even the publisher's name gives one a slight pang: Lutterworth Press, founded by the Religious Tract Society, used to publish *The Boy's Own Paper* [1879-1967] – nice to know the outfit is still in existence, even if its most famous publication, like Marcus Morris's *Eagle*, is long dead.) *12th May 1998.*

Nylund, Eric S. **Dry Water.** Avon/Eos, ISBN 0-380-79614-7, 362pp, A-format paperback, $3.99. (Fantasy novel, first published in the USA, 1997; reviewed by Gwyneth Jones in *Interzone* 122.) *April 1998.*

Page, Jake. **Apacheria.** "An epic of alternate history." Del Rey, ISBN 0-345-41411-X, 342pp, A-format paperback, cover by Jane Sterrett, $5.99. (Sf novel, first edition; it's set in a timeline in which history diverged in the 1880s, with the Apaches uniting to fight off the US Cavalry; the author, who is not young, is a well-established writer of mystery-westerns, and apparently an expert on Native American matters.) *1st April 1998.*

Parkinson, Dan. **The Whispers: Book One of The Gates of Time.** Del Rey, ISBN 0-345-41380-6, xii+268pp, A-format paperback, $5.95. (Sf novel, first edition; it appears to be a packaged book in that it's copyright "Siegel & Siegel Ltd"; Dan Parkinson [born 1935] is described as "the author of many westerns as well as a number of successful TSR fantasy novels"; chapter one begins with the words: "In western Kansas one seldom hears the wind..."; so how come Del Rey are suddenly filling their sf list with old western writers? [see also Jake Page, above]; actually, in some ways it's a welcome change, since both these authors seem pleasantly old-fashioned in style: they're capable of writing solid paragraphs, rather than the jittery two-and-three-word verbless sentences which seem to have become the TV-driven norm among so many commercial sf/fantasy writers of late.) *1st April 1998.*

Pynchon, Thomas. **Mason & Dixon.** Vintage, ISBN 0-09-977191-8, 773pp, B-format paperback, £7.99. (Mainstream historical novel with some sf/fantasy elements, first published in the USA, 1997; the Mason and Dixon of the title are the real-life 18th-century surveyors who drew the line on the map of the USA which separated North from South; one reviewer, Michiko Kakutani of the *New York Times*, is quoted as follows: "A hugely ambitious epic about America and the Age of Reason and the origins of modernity that showcases all of Mr Pynchon's gifts as a writer: his magical ability to fuse history and fable, science and science fiction; his Swiftean grasp of satire and his vaudevillian's sense of farce.") *No date shown: received in April 1998.*

Ransmayr, Christoph. **The Dog King.** Translated by John E. Woods. Vintage, ISBN 0-09-976691-4, 355pp, B-format paperback, cover by Sophie Marsham, £6.99. (Alternate-world sf novel, first published in Germany as *Morbus Kitahara*, 1995; it's a mainstream effort, set in a post-World War II Germany which has been punished by being stripped of all high technology; the author is Austrian, born 1954, but we are told that he presently lives in Dublin; this translation first appeared in hardcover in 1997 [Knopf, USA; Chatto, UK] and was "reviewed" by one of our letter-writers, Ian Andrew Allwyn, in *Interzone* 125 [pages 4-5]: "reminiscent of Golding's *Lord of the Flies*... well-written, with a superbly realized sense of place... recommended.") *No date shown: received in April 1998.*

Reed, Robert. **An Exaltation of Larks.** Tor, ISBN 0-312-85887-6, 251pp, trade paperback, $12.95. (Sf novel, first published in the USA, 1995; reviewed by Ken Brown in *Interzone* 105.) *9th April 1998.*

Resnick, Laura. **In Legend Born.** Tor, ISBN 0-312-89055-9, 461pp, hardcover, $25.95. (Fantasy novel, first edition; proof copy received; this is a debut fantasy by sf author Mike Resnick's daughter; it's far from being her debut novel, however, as we're told she is "the award-winning author of over a dozen romance novels published under the pseudonym Laura Leone"; she has also written a non-fiction book called *A Blonde in Africa* – obviously a chip off the old block [see below].) *August 1998.*

Resnick, Mike. **Kirinyaga: A Fable of Utopia.** Del Rey, ISBN 0-345-41701-1, vii+293pp, hardcover, cover by John Harris, $25. (Fix-up sf novel, first edition; this is actually a compilation of short stories from over the past decade – which, it turns out, were intended all along to be the chapters of a novel; several of the segments won awards [which Mr Resnick is at pains to remind us, in his six-page afterword, claiming that this is "the most honored science-fiction book in history"]; based on the author's knowledge of Kenya, where he has been for many holidays, it's set on a future space colony where attempts are made to recreate the East Africa of old; it seems odd that Resnick, who has no obvious links with the continent other than the fact that he has been on several safaris there, should have made himself American sf's unofficial spokesman for Africa: it would be interesting to know what Kenyan readers think.) *Late entry: 5th March publication, received in April 1998.*

Russell, Jay S. **Burning Bright.** "A Marty Burns novel." St Martin's Press, ISBN 0-312-18545-6, 280pp, hardcover, $23.95. (Crime/horror novel, first published in the UK, 1997; the author's third novel, following *Celestial Dogs* and *Blood*.) *15th May 1998.*

Salvatore, R. A. **The Demon Awakens.** Del Rey, ISBN 0-345-42162-0, viii+606pp, A-format paperback, cover by Alan Pollock, $6.95. (Fantasy novel, first published in the USA, 1997; shouldn't the title be *The Demon Awakes*?; or is the titular demon awakening something in somebody else – feelings of revulsion, perhaps?) *1st April 1998.*

Salvatore, R. A. **The Demon Spirit.** Del Rey, ISBN 0-345-39151-9, viii+465pp, hardcover, cover by Alan Pollock, $25.95. (Fantasy novel, first edition; sequel to *The Demon Awakens* [sic; 1997]; it's a Big Commercial Fantasy "epic masterwork" [as the publishers have it], complete with end-paper maps.) *1st April 1998.*

Sawyer, Robert J. **Factoring Humanity.** Tor, ISBN 0-312-86458-2, 350pp, hardcover, $23.95. (Sf novel, first edition; proof copy received; Sawyer, Nebula Award-winner for *The Terminal Experiment* [1995], is becoming rather prolific: this one follows on the heels of such other novels as *Starplex* [Ace, October 1996], *Frameshift* [Tor, May 1997] and *Illegal Alien* [Ace, December 1997].) *July 1998.*

Sheffield, Charles. **Aftermath.** Bantam Spectra, ISBN 0-553-37893-7, 452pp, trade paperback, $13.95. (Sf novel, first edition; proof copy received; it looks like a good old British disaster story: a nearby supernova causes a cataclysm on Earth.) *10th August 1998.*

Snyder, Midori. **The Innamorati.** Tor, ISBN 0-312-86197-4, 381pp, hardcover, $23.95. (Fantasy novel, first edition; proof copy received; it's set in "an alternate Renaissance Venice.") *July 1998.*

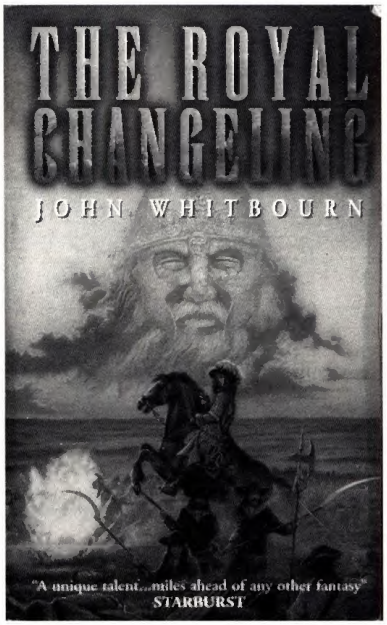
Spedding, Alison. **A Cloud Over Water: Book II of A Walk in the Dark.** Voyager, ISBN 0-00-648266-X, xiv+348pp, A-format paperback, cover by Mick Posen, £5.99. (Fantasy novel, first published in 1988; originally published by Unwin under the byline "Spedding" and out of print for the best part of a decade, it concerns an Alexander the Great-like world conqueror; evidently, the eccentric but talented British author, who resides in Bolivia, has been persuaded to divulge her forename for this reprint; presumably Voyager have also reissued volume one, *The Road and the Hills* [reviewed by Wendy Bradley in *Interzone* 27], but they didn't send it to us.) *18th May 1998.*

Stewart, Sean. **Clouds End.** Ace, ISBN 0-441-00525-X, 360pp, A-format paperback, cover by Tara McGovern-Benson, $6.50. (Fantasy novel, first published in the USA, 1996; we did not see this one in hardcover, but it seems to have received rave reviews in the States: it's "an extraordinary non-generic fantasy," according to *Locus*; in a brief afterword the author says, "I want to acknowledge a debt that can never be paid to J. R. R. Tolkien"; nice to know that someone can be influenced by Tolkien without mimicking him.) *May 1998.*

Strauss, Victoria. **The Arm of the Stone.** Avon/Eos, ISBN 0-380-79751-8, 426pp, A-format paperback, cover by Hal Just, $5.99. (Fantasy novel, first edition; it's by an author unknown to us, except for the fact that she once wrote a fantasy novel called *Worldstone* [1985]; it may be pseudonymous, or it may be an "above-ground" book from a writer hitherto published in the "gender-bending" small press [which seems to be flourishing mightily in the USA]; the hero is called Bron – which,

if we remember rightly, John Clute once referred to as "a burly moniker"; the quotation on the half-title page begins: "With the sixth lash Serle cried out at last, an awful ragged sound. Bron knew what the loss of control must cost his brother. The lash fell again..."; more sado-masochism from Avon/Eos? – they seem to be making it something of a house speciality... at least in the way they package their books.) *April 1998.*

Wake, Paul, Steve Andrews and Ariel, eds. **Waterstone's Guide to Science Fiction, Fantasy & Horror.** Waterstone's, ISBN 0-9S2740S-8-3, 204pp, larger-than-B-format [squarish] paperback, £3.99. (Guide to the sf, fantasy and horror genres, first edition; it contains many brief, intelligently-written entries on authors, but it seems to list only those books which are in print and available through Waterstone's bookshops, making this a kind of glorified catalogue [nothing by Pat Cadigan is currently in print in the UK, and nothing by Edgar Rice Burroughs, Robert Sheckley or Cordwainer Smith – even C. S. Lewis's "Ransom" trilogy is now out of print!]; a few misspellings or typographical errors – "humourous," "Maltzberg" – catch the eye; guest contributors, each of whom has written an introductory piece for one of the sections of the book, are Stephen Baxter, Ramsey Campbell, John Clute, Neil Gaiman, Peter F. Hamilton, Anne McCaffrey and Robert Rankin; there is also an interview with Michael Marshall Smith; editors Wake, Andrews and Ariel are all members of Waterstone's bookshop staff; unfortunately, their level of *Interzone*-consciousness is low: there is a "useful addresses" page at the back which doesn't list this magazine, although it contains details of small-press publications like *BBR* and *Zene*.) *21st April 1998.*

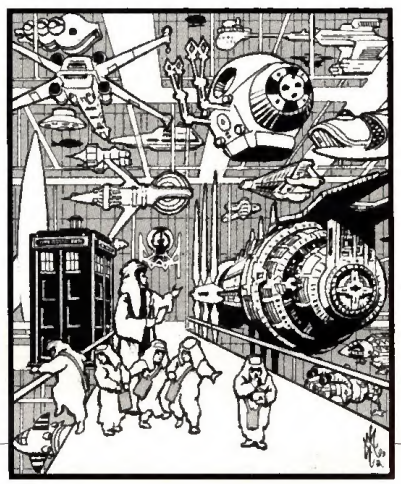


Waldrop, Howard. **Going Home Again.** Foreword by Lucius Shepard. St Martin's Press, ISBN 0-312-18S89-8, 223pp, hardcover, $20.9S. (Sf/fantasy collection, first published in Australia, 1997; proof copy received; apparently first published by Eidolon Publications, Down Under, though we never saw it or heard tell of it, this is the first edition to appear in its author's home country; it contains nine previously-uncollected stories, with an introduction by the author [in which he grumbles about the woes of the short-story writer in today's world], a lengthy afterword to each story, and a complete, detailed bibliography of the author's work at the end; an accompanying publicity letter from Gordon Van Gelder reminds us that "there's a rumor going around that the words 'unique' and 'inimitable' were invented to describe Howard Waldrop's fiction.") *July 1998.*

Whitbourn, John. **The Royal Changeling.** Earthlight, ISBN 0-671-0178S-3, 280pp, A-format paperback, cover by Mike Posen, £S.99. (Historical fantasy novel, first edition.) *May 1998.*

Spinoffery

This is a list of all books received that fall into those sub-types of sf, fantasy and horror which may be termed novelizations, recursive fictions, spinoffs, sequels by other hands, shared worlds and sharecrops (including non-fiction about shared worlds, films and TV, etc.). The collective term "Spinoffery" is used for the sake of brevity.



Altman, Mark A., and Edward Gross. **Trek Navigator: The Ultimate Guide to the Entire Trek Saga.** Boxtree, ISBN 0-7S22-24S7-3, xv+286pp, B-format paperback, £9.99. (Sf TV-series episode guide, first published in the USA, 1998; alphabetically arranged by episode title, it contains opinionated entries on all segments, from "classic" *Star Trek* through *Stor Trek: The Next Generation* to *Star Trek: Voyager*, plus other spinoff series and films; it's a heavy, information-packed little paperback, although largely unillustrated except for repeated vignette photos of the authors in silly poses.) *24th April 1998.*

Bischoff, David. **Quoth the Crow.** "The Crow." Voyager, ISBN 0-00-648364-X, 277pp, A-format paperback, cover by Cliff Nielson, £S.99. (Horror movie-and-comic-book spinoff novel, first published in the USA [?], 1998; it's "based on characters created by James O'Barr," and is copyrighted "Edward R. Pressman Film Corporation"; Edgar Allan Poe is quoted copiously throughout; it appears to be the first in a series of which other titles are by Poppy Z. Brite and Chet Williamson.) *5th May 1998.*

Dicks, Terrance. **Catastrophea.** "Doctor Who." BBC Books, 0-S63-40S84-8, 248pp, A-format paperback, £4.99. (Sf TV-series spinoff novel, first edition.) *5th May 1998.*

Hambly, Barbara. **Planet of Twilight.** "Star Wars." Bantam, ISBN 0-SS3-S0S29-7, 389pp, A-format paperback, cover by Drew Struzan, £S.99. (Sf movie spinoff novel, first published in the USA, 1997; follow-up to the same author's *Children of the Jedi*.) *7th May 1998.*

Leonard, Paul. **Dreamstone Moon.** "Doctor Who." BBC Books, 0-S63-40S8S-6, 2S0pp, A-format paperback, £4.99. (Sf TV-series spinoff novel, first edition.) *5th May 1998.*

Pratchett, Terry, and Stephen Briggs. **A Tourist Guide to Lancre: A Discworld Mapp.** Artwork by Paul Kidby. Corgi, ISBN 0-SS2-14608-0, unpaginated, £4.99. (Humorous fantasy map and spoof guide booklet, spinoffs from Pratchett's "Discworld" novels; first edition.) *7th May 1998.*

Stackpole, Michael A. **I, Jedi.** "Star Wars." Bantam Press, ISBN 0-S93-04224-7, 464pp, hardcover, cover by Drew Struzan, £12.99. (Sf movie spinoff novel, first published in the USA, 1998; in his acknowledgments the author refers to "the manic month in which this book was written"; a 460-page novel in a month – this may well be true, and it's in the great tradition of pulp writing ["feel my wordage!"], but wouldn't it be politer to keep such things a trade secret?) *7th May 1998.*

Addendum:

Clute, John and Peter Nicholls, eds. **Science Fiction: The Multimedia Encyclopedia of Science Fiction.** Focus Multimedia [The Studios, Lea Hall, Enterprise Park, Armitage Rd., Rugeley, Staffs. WS1S 1LH], ESS-119, CD-Rom disc, £9.99. (Encyclopedia of sf in computerized, audio-visual form; first published in this format in 199S and based on the book of 1993 [with corrections and updatings to 199S]; previously priced at over £30 from Grolier Interactive, this re-release – in a simple plastic case rather than the previous big packaging – is obviously a bargain; the text is apparently complete and unchanged; if you have a CD-Rom drive, buy this essential disc now!) *Late entry: March release, received by us in April 1998.*

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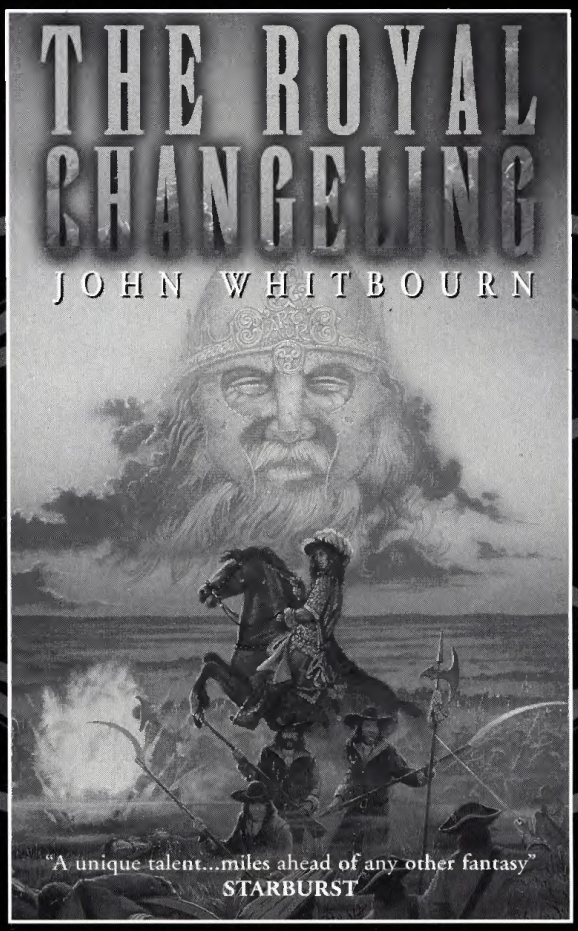
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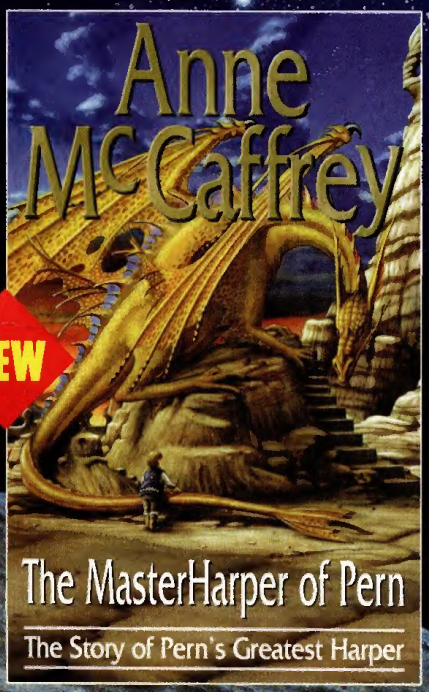
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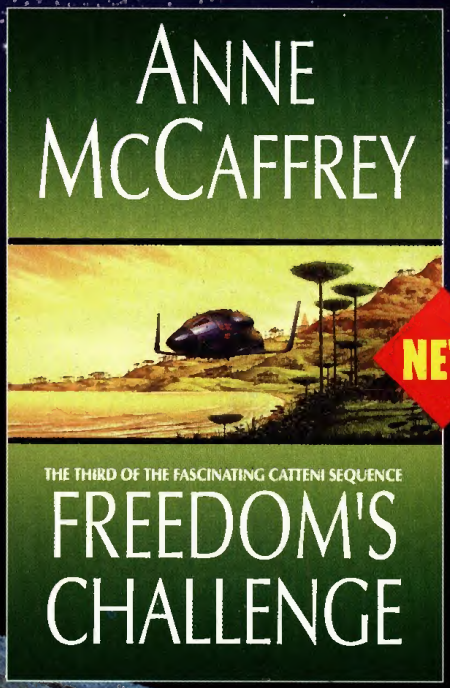
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